2008

The Yale Blocks: NAIOP Real Estate Development Workshop

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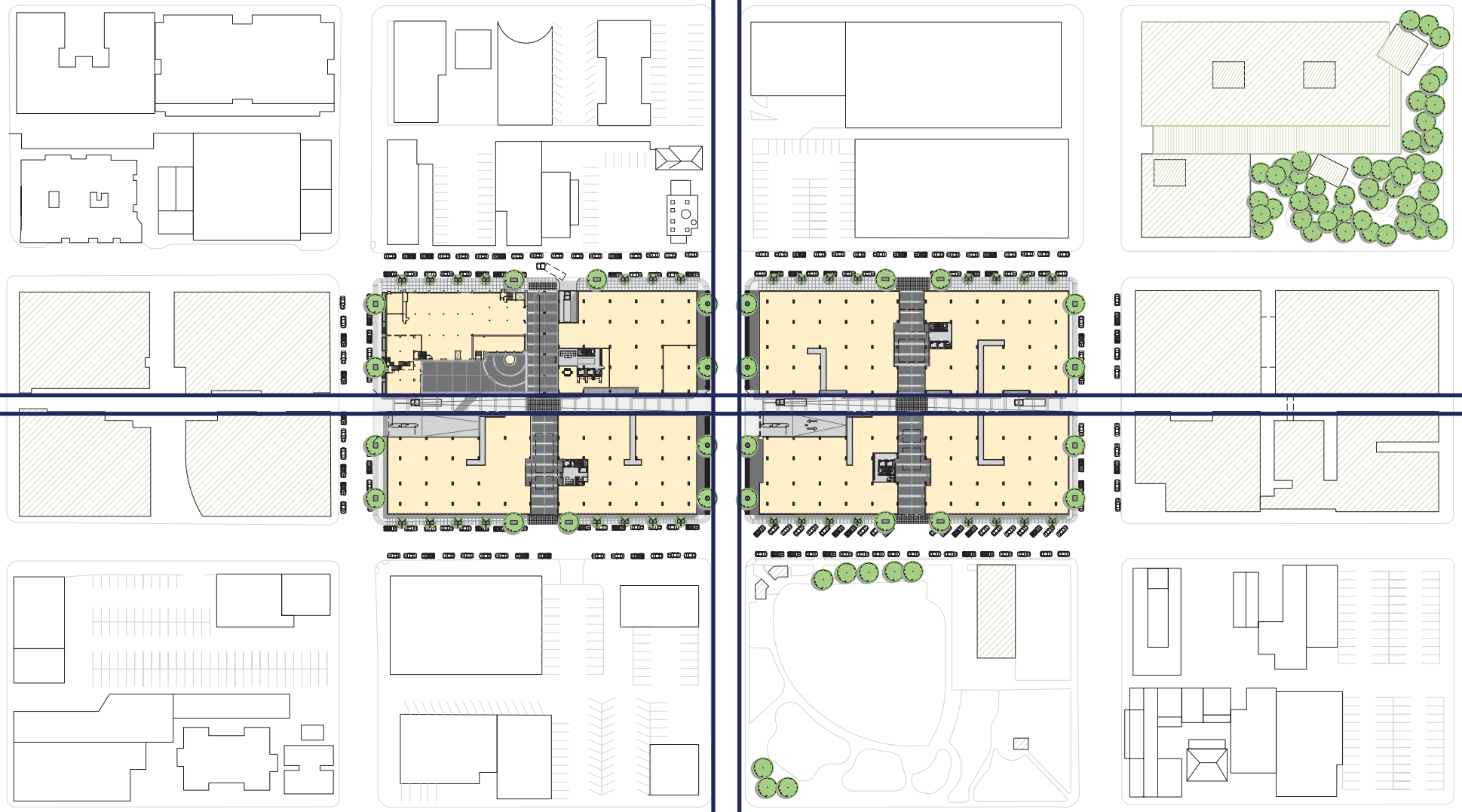
Yale Blocks



2008

NAIOP Real Estate Challenge

Vulcan Properties

Portland State University

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1. EXECUTIVE SUMMARY

The Yale Blocks retail and residential development will establish Seattle's South Lake Union District as a vibrant place to live and work. Located on two adjacent city blocks, and circumscribed by Yale, Pontius, Republican, and Thomas, the Yale Blocks includes 679 high-quality, Unico Inhabit module apartment units atop 163,000 square foot (SF) complete community retail center with interspersed pedestrian-friendly alleys. An efficient multi-block shared parking garage with 732 stalls located below the retail level creates the opportunity for significant development density. From the efficient modularity of the apartments to the anticipated LEED Gold rating, the Yale Blocks will be a model of profiting through sustainability – for the developer, the residents, and the city of Seattle. Ten key decisions guided our team's development program:

Decision #1: Develop blocks 10 and 11 in conjunction with Vulcan's adjacent third block, Alley 24, to make the whole greater than the sum of its parts.

Since Vulcan owns all three blocks, competing would be counterproductive. Instead, Yale Blocks complements the strength of its neighbor's retail, office, and residential assets by offering retail tenants and residential units, creating a dynamic live-work community. As a result, the three blocks' rental rates will benefit, while vacancies will decrease.

Decision #2: Split the two blocks into eight quadrants with north-south and east-west alleys.

This program decision reinforces the character and pattern of Alley 24, permits differentiation among the various quadrants, allows maximum phasing potential, and creates 32 visible retail corners.

Decision #3: Phase the project first on Yale, followed by Pontius.

The success of our retail program is partly driven by the REI and Alley 24's retail tenants. We decided to carry that momentum northward along Yale, building a space for our anchor grocer tenant, Trader Joes, early in the construction process. Thus, we will rapidly build retail strength on the west side of the development, which in turn will make Pontius retail across from Cascade Park, more marketable. A strong retail service mix will enhance our residential units as a complete neighborhood place and shorten absorption periods.

Decision #4: Capture workers from adjoining offices rather than saturate the office market.

With Blume's future 776,000 SF office development (Yale Campus) to the north, Alley 24's 180,000 SF of office to the south and Amazons proposed 1.6mm SF of office a few blocks away, we decided to provide retail and living spaces for the more than 12,000 new South Lake Union office workers. Furthermore, the Yale Blocks helps South Lake Union balance its irregular residential-to-office ratio. Capturing just 6% of these office workers will fill our residential component.

Decision #5: Develop small rental units affordable to the burgeoning creative class workforce.

South Lake Union is mainly an office zone – not yet a neighborhood where people are willing to purchase residences on a large scale. In combination with Vulcan's long-term ownership strategy, this fact governed our decision to develop rental units. Since Alley 24's residential units showed the highest occupancies in studios and one-bedrooms, we opted for a similar unit mix.

Decision #6: Fill both blocks with 1.5 levels of connected, shared below-grade parking.

Maximizing parking spaces allows us to maximize development density. Taking advantage of the 18' elevation drop between the SE to NW corners, we sloped the parking garage parallel to grade to minimize excavation costs. Additionally, our large-floor plate and efficient parking layout reduces the need for ramps and retaining

walls, ensuring a lower cost per space. By connecting the two sites underground, we also gained 17 parking spaces while enlarging the effective shared parking pool, as compared with two separate garages.

Decision #7: Create a diversified community retail center with grocer and pharmacy.
The inclusion of a grocer and pharmacy reinforces the Cascade neighborhood and Yale Blocks as a place to live. It extends the momentum of Yale Avenue's retail strength in REI and Alley 24. Additionally, it allows us to strategically place sub-anchors and build fewer residential common area amenities (i.e., fitness center) in favor of rental tenants for those services.

Decision #8: Use Unico's Inhabit multi-family modular unit system.
We chose modular building over traditional site-built construction. Our decision was driven by quality, cost, and time line advantages. Unico Properties has spent two years and over $1 million in R&D on scalable units that offer flexibility to develop end-to-end units with natural light, cross ventilation in every unit, and high rents. Additionally, this method of construction allows for a more strategic phasing plan. As a risk reduction strategy, modular units could be moved in the future should zoning regulations or market conditions suggest other higher density uses..

Decision #9: Build modular units in mixed configurations to create separate identities maximizing the advantages of each.
Separating the two blocks into eight quadrants allowed us to create three residential communities with distinct identities. The different characteristics (e.g., location, view, and lighting) of blocks 10 and 11 further suggested varying layouts and unit mixes of the modular units.

Decision #10: Retain the historic Supply Laundry building as a McMenamins Brew Pub.
McMenamins is originally a brew pub operator with locations in Washington and Oregon. They currently operate three locations in the Seattle area as well as Olympia and Vancouver. They operate a variety of venues ranging from brew pubs, hotels, spas, music & theater halls, and movie theatres, most of which are located and operated in historic properties. McMenamins has a proven track record of transforming historic structures into gathering places for the creative class. We have contacted Portland-based McMenamins top executives, which have expressed direct interest in this space.

The sum of our decisions is to create the Yale Blocks as a new neighborhood, where the whole is greater than the sum of the parts; where the economic returns to the developer of 8% return on cost and 23% IRR exceed Vulcan's stated requirements; and, where Vulcan's risk is limited by keeping its equity under 25% and requiring only $5 million in working capital on a $160 million project. In addition, the Yale Blocks meet other elements of Vulcan's triple bottom line – the project will attain a LEED Gold rating, will adaptively reuse the historic Supply Laundry building, and will greatly expand Seattle's tax base generating $1.9 million in annual tax revenues

Throughout the following sections, we will expand upon each of these decisions and others that we encountered in our development process. Additionally, we will explore our proposed development program and design, deal structure and economic model, and construction and sustainability issues.

2. DEVELOPMENT PROGRAM

The Yale Blocks' site comprises 175,600 SF in the Cascade neighborhood of Seattle's South Lake Union District. In attempting to determine the highest and best use of this site, we evaluated potential uses including hotel, office, multifamily condos, multifamily rentals, and retail. Our evaluation led to the following conclusions:

- *Hotel*: Ten hotels are currently either under construction or proposed in or near Seattle's core, leading to possible over saturation in the hotel market. Additionally, our site is not conducive to the needs of a successful hotel, since tourist amenities are lacking.

- *Office*: The office market has been explosive in Seattle. With over 3.5 MM SF of office space under construction and double that in planning and/or permitting, it would be advantageous to complement office space, rather than compete against it.

- *Condos*: With Vulcan's recent and current construction of three condominium projects in South Lake Union, additional condos would likely cannibalize Vulcan's sales.

- *Low-income multifamily*: Since a portion of Alley 24's units are dedicated to renters 60% under the median household income, we explored low-income housing. However, after discussions with Vulcan, we opted not to pursue this strategy because low-income would prevent us from enjoying future 8-12% rent increases.

We chose to focus Yale Blocks' development program on multifamily rental units in order to build a vibrant neighborhood whose life extends beyond workday hours into an area where people can live, work and play. Given the consistently strong growth in South Lake Union commercial space during the past four years, housing best complements and supports the newly arriving businesses by providing work force housing. Two of the largest additions of office space will be Amazon's headquarters at 1.6MM SF (three blocks away) and Blume's Yale Campus at 776,000 SF (north of block 10). This combined office space will support more than 12,000 employees. Amazon plans to phase into its new headquarters over the course of three years – from 2008 to 2011. This influx will undoubtedly increase demand for housing and services in the immediate area.

To supplement the Yale Blocks' housing component, we will develop a diversified street level retail component, which will include a full range of goods and neighborhood services. The Yale Blocks' retail component creates a sense of place and neighborhood, while targeting three primary customer groups:

- *Employees and students*: Yale Blocks will meet the daytime needs of current and future businesses and education institutions that will occupy nearby office space.

- *Cascade residents*: The retail development reinforces South Lake Union as a place to live by satisfying the community needs of Cascade neighborhood residents (Alley 24's 172 units + Amli + Alcyon), including the 679 new Yale Blocks residential households.

- *Destination shoppers*: Yale Blocks is enhancing the shopping and dining experience of shoppers drawn to the area's prime retail anchor, REI. A significant slice of REI's market is the 24-35 year old, outdoorsy, creative, and technical classes.

RESIDENTIAL

The area surrounding the Yale Blocks is a mix of market rate apartments and affordable housing. The five relevant comparable projects in and

around the Cascade neighborhood are: 1) Alley 24, 2) Alcyone, 3) The Cairns, 4) Mercer View, and 5) AMLI 535. These developments were all completed post-1999, thus offering comparable units and amenities. In addition, they target similar demographics. Our second tier of comparable includes eight additional apartment properties in the downtown area. Combined, these comparables give us a thorough data set from which to create unit mix and pricing assumptions.

MODULAR UNITS

Large scale use of modular residential construction makes the Yale Blocks development unique amongst its multifamily counterparts. During the past two years, Unico Properties has invested more than one million dollars into research and development of its Inhabit system. By making this investment, Unico is attempting to introduce America to a concept that has been remarkably successful in Europe – the concept of high-quality, modular, urban living spaces. Utilizing the design expertise of Seattle architecture firms Mithun and HyBrid, and contractor RAFN, Unico's Inhabit system is superior to site-built construction in several ways:

- *Improved quality*: Customers do not buy cars built in muddy lots. The same analogy applies to site-built construction in Seattle's rainy climate. Even in the "building season" (summer), exposed framing lumber is often battered by rain. Trapped moisture destroys structures during the course of several years. On the other hand, Inhabit modules are built to exacting specifications in a 125,000 SF indoor, dry manufacturing facility. The engineered wood frames are constructed in racks ensuring perfectly square, straight, and dry structures. Finishes fit together seamlessly; tolerances are tighter; and, the overall quality is higher than traditional built apartment buildings. To the resident they receive superior finishes and fixtures and higher quality design features than traditional stick build methods allow. To the developer the modular units compared to stick built methods offer higher quality construction and lower operational and maintenance expenses. Soft costs are also considerably reduced since the entire system has already been designed and engineered.

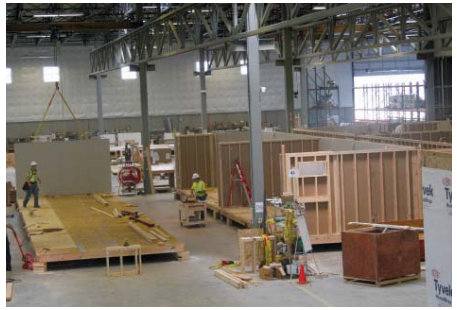
- *Shortened construction time line*: Part of the factory's assembly line manufacturing process includes permitting and inspections. According to Unico units can be permitted in six days by the state Bureau of Labor and Industries versus 150 days from the City

of Seattle. Inspectors walk down each row of completed units, issuing permits on the spot. This accelerated permitting process dramatically undercuts the more typical 6-12 month permitting time line in Seattle's multifamily construction. This directly equates to 6-12 months of savings on construction loan interest payments.

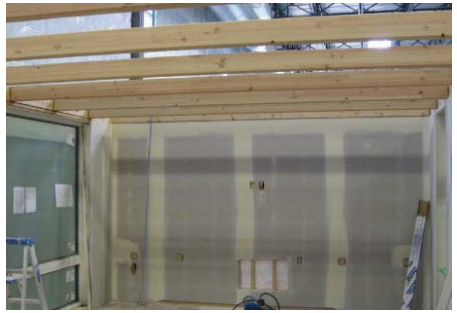
- *Financial benefits*: While Inhabit requires a down payment for the units, Inhabit does not require full payment until the units are delivered and installed on site. This payment structure is favorable to our cash flow model in several ways. First, it delays our outlay of construction costs, and because the units come "shrink-wrapped" and ready to occupy, minimizes our lease-up period. Second, modular construction is not subject to the set of typical construction risks (e.g., weather). As a result, construction costs are more certain. Lastly, because "picking and dropping" the units with a crane and then securing them is a quick operation, modular units are highly phase-able. Thus, we are able to more closely match revenues to cash outlays.

- *Minimal waste*: Because the modular units are produced in a controlled, precise environment, Inhabit is able to specify accurate dimensions of materials from its local product suppliers, thus limiting waste produced from material cutoffs. When cutoffs are necessary, however, the excess material is recycled to create new material.

- *Increased flexibility*: An interesting benefit of modular units is their flexibility. While the Yale Blocks is a residential and retail development, should the zoning change ten years from construction, costs to move the modular units to another site are minimal compared to tearing down a stick-built structure, in which the materials can rarely be reused.

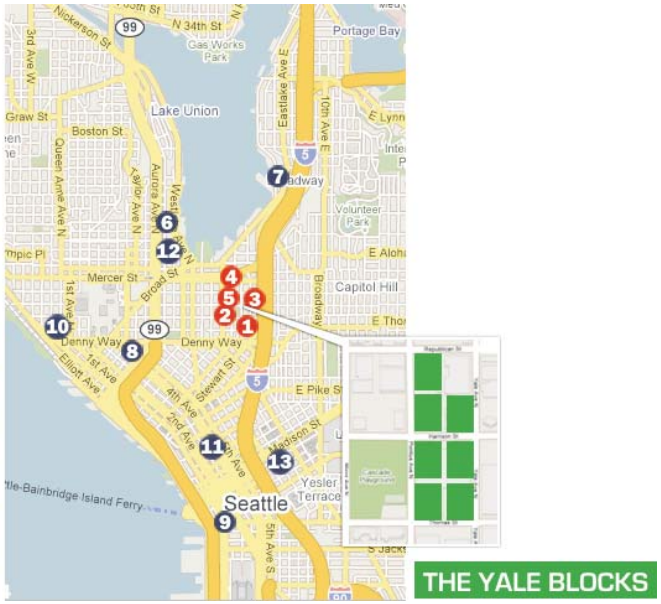



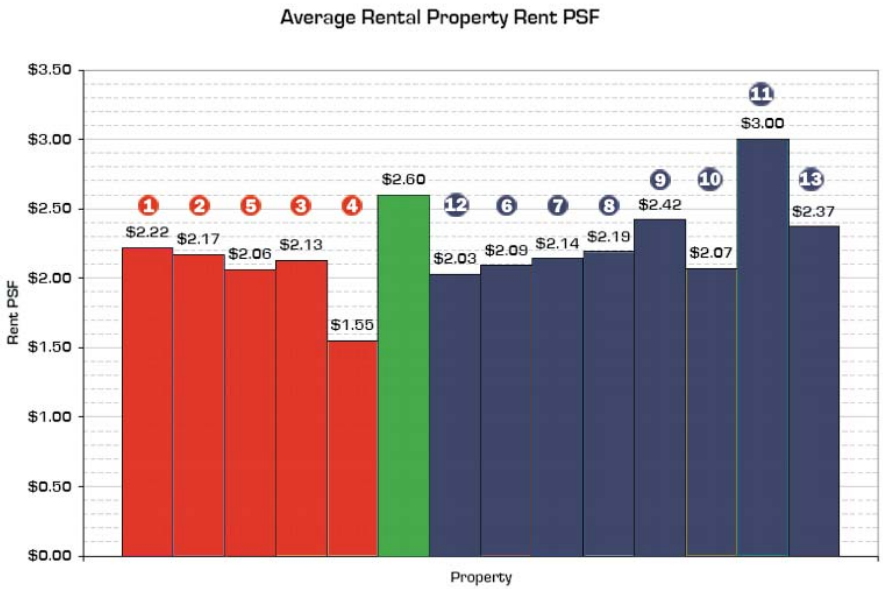





In less than three weeks a unit can be built completely indoors. High-tech engineering and a controlled building environment efficient stage production work without costly weather delays. Pre-programed machines do all the cutting with precision down to the millimeter.

1. ALLEY 24
2. ALCYONE
3. THE CAIRNS
4. MERCER VIEW
5. AMLI 535
6. DEXTER
7. ILLUMINA
8. SIDNEY
9. METRO ON 1ST
10. LA VIE AT QUEEN ANNE
11. THE COBB
12. NEPTUNE
13. M STREET





TARGET MARKET

The target market for our residential units is the creative class demographic, defined as college-educated 24-35 year-olds. Marcus & Millichap's 2008 Seattle Annual Report states that strong growth is expected in the "20 to 34 year-old age cohort" and that demographic group is "growing at a rate almost twice as fast as the metro's total population growth." This age group is drawn to a vibrant, active urban environment – the type of environment into which South Lake Union is currently transitioning.

Cascade Neighborhood Comparables*

		Unit Mix											
		Studio				One Bedroom				Two Bedroom			
Property	No Units	% Of Units	Avg SF	Avg Rent	Rent PSF	% Of Units	Avg SF	Avg Rent	Rent PSF	% Of Units	Avg SF	Avg Rent	Rent PSF
Alley 24	172	32%	501	$1,295	$2.58	52%	825.00	$1,742	$2.11	16%	1247	$2,369	$1.90
Alcyone	161	29%	503	$1,283	$2.55	51%	828.00	$1,823	$2.20	20%	910	$2,035	$2.24
The Cairns	100	40%	466	$1,188	$2.55	33%	711.00	$1,595	$2.24	27%	1091	$1,920	$1.76
AMLI 535	199	16%	613	$1,275	$2.08	64%	748	$1,573	$2.10	19%	1083	$2,117	$1.95
	Averages	29%	521	$1,260	2.44	50%	778	$1,683	2.16	21%	1083	$2,110	1.96
									Calculations of Avg Rent & Rent PSF conducted only on market rate units*				
YALE BLOCKS	679	56%	468	$1,253	$2.68	44%	675	$1,688	$2.50	-	-	-	-

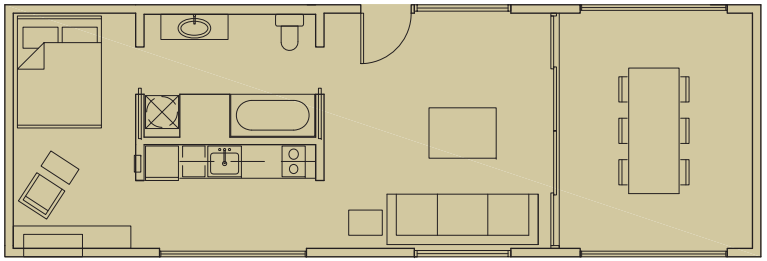
The scatter chart to the left provides a detailed snapshot of the rental market in and around South Lake Union. The pink data points represent the rent per square foot of a unit in the market, while the corresponding blue dot represents the average rent for that particular unit. A trendline has been generated for each data set to show the relationship that exists in the market. It is apparent there is a positive relationship between square footage and rent, and a negative relationship between square footage and rent per square foot.

The Yale Blocks aim to take advantage of smaller unit sizes which obtain the highest rent per square foot.

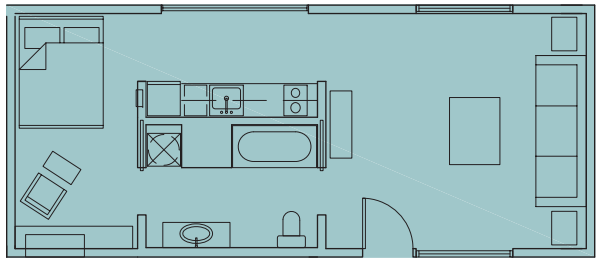
UNIT MIX

The floor plan below shows the unit mix in the residential layout. Units include studios, studio pluses, and one bedrooms. Additionally, the residential development is flexible enough to convert side-by-side modules into two bedroom units if the market demands. Considering the large volume of the Yale Blocks' purchase order for Inhabit modular units, we feel confident that should the unit mix change slightly three to six months before construction, we will be able to successfully negotiate those changes with little to no added cost.

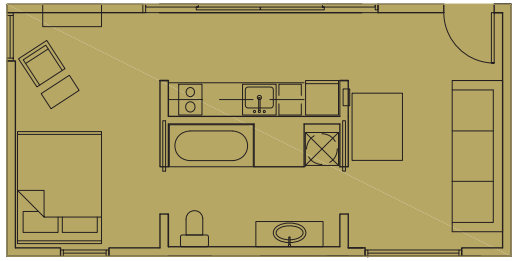
This unit mix targets the lifestyles of the demographic groups that will respond most favorably to the Yale Blocks development. Many creative-class singles or couples will find these efficient layouts and affordable price points consistent with their rental criteria. Additionally, this unit mix utilizes floor plans that command the highest rent per square foot, which in turn maximizes overall rental revenue. We are able to do this, while still leaving room for open courtyards.



1 BEDROOM



STUDIO PLUS

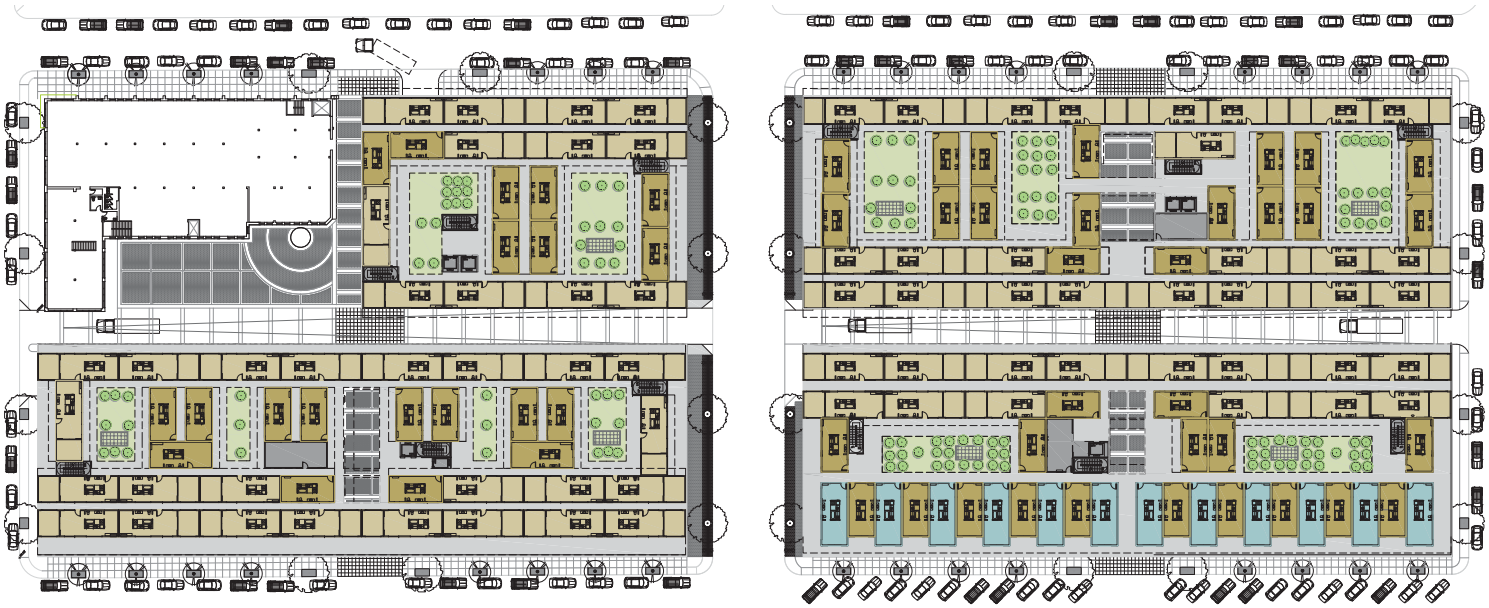


STUDIO

TYPCIAL UNIT LAYOUT

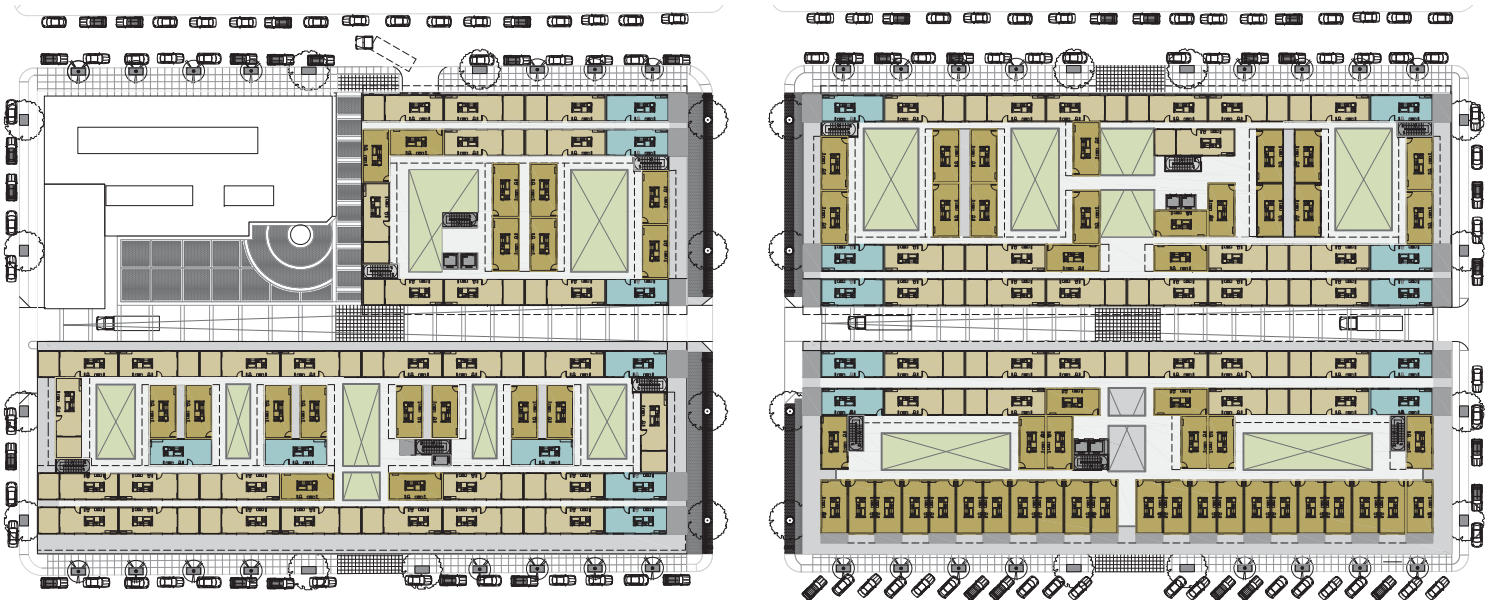
Yale Blocks Residential Unit Mix

Floor Plan	Size	No. Units	% of Project
Studio	450	289	43%
Studio Plus	525	90	13%
One Bedroom	675	300	44%
Two Bedroom	-	-	-
Development Totals/Averages	559	679	100%



1 APARTMENTS: LEVEL 1

0 25 50 100



1 APARTMENTS: LEVELS 2-5

0 25 50 100

LEGEND

- 1 Bedroom
- Studio +
- Studio
- Open Courtyard
- Walkway

We chose not to pursue two bedrooms. Our research showed that the market is flush with people who can afford one bedrooms, but not two bedrooms. And currently, two bedrooms show higher vacancies than studios or one bedrooms.

However, we are designing the residential development so that as we proceed with the project, we can make refinements to the mix, such as adding two bedrooms. To the right is a diagram that illustrates how the unit mix can be refined with anywhere from studio to 3-bedroom configurations.

In our survey of 13 properties in and around downtown Seattle and South Lake Union district, the following average unit sizes and layouts commanded the following rents:

Downtown/SLU Apartment Market Comparable Survey: Unit Averages

Floor Plan	Average Size	Average Rent	Average Rent PSF
Studio	522	$1,227	$2.35
One Bedroom	713	$1,661	$2.33
Two Bedroom	1028	$2,220	$2.16
Market Averages	**754**	**$1,703**	**$2.28**

Our closest comparable – Alley 24 – currently has studio and studio-plus rents that range from $1.96 to $4.25 PSF, or $950 to $1,750 monthly rent. Alley 24 one-bedroom units obtain rents that range from $1.87 to $2.57 PSF, or $1,450 to $2,200 per month. We plan to develop rental pricing with the following rent range schedule in today's dollars. We have modeled these rents to escalate by 4% per year.

We plan to develop rental pricing with the following rent range schedule (in today's dollars):

Yale Blocks Residential Target Rents

Floor Plan	Size	Average Rent	Average Rent PSF
Studios	450	$1,193	$2.65
Studio Plus	525	$1,444	$2.75
One Bedroom	675	$1,688	$2.50
Two Bedroom	-	-	-
Development Averages	**550**	**$1,445**	**$2.60**

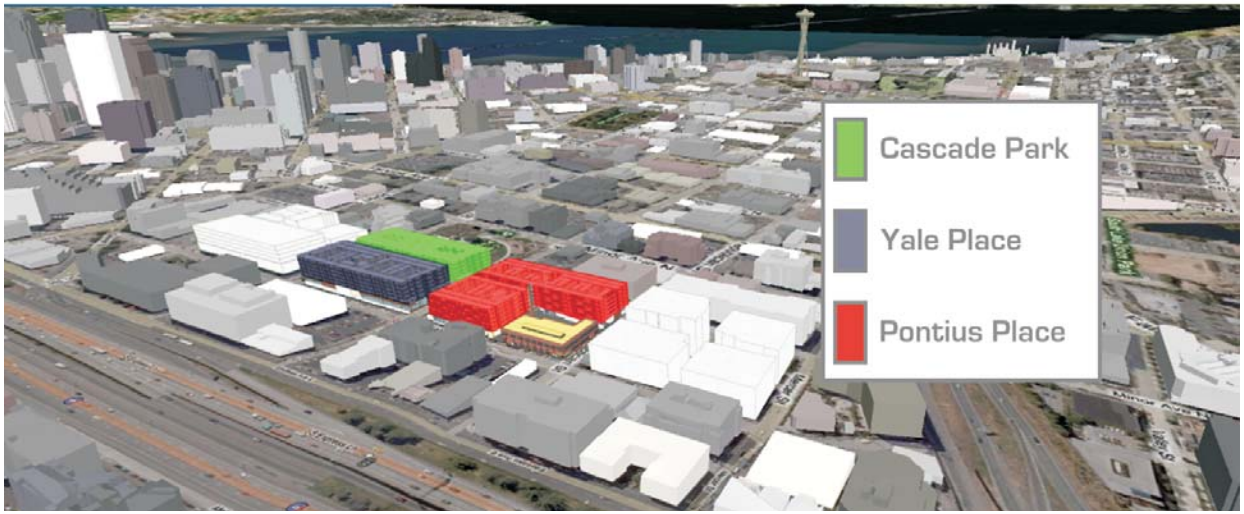
DISTINCT COMMUNITIES

Our team plans to create three distinct communities within the context of the Yale Blocks, each with its own characteristics. This design philosophy creates smaller scale, neighborhood-friendly environments, avoiding the overwhelming sense that often accompanies large scale housing developments. The three clusters or communities include:

- *Yale Place*: Surrounding courtyards 1-4, Yale Place is situated above the vibrant Yale Avenue retail on block 11. 130 of the 152 units in Yale Place look inward to one of the four courtyards.

- *Cascade Park*: Surrounding courtyards 5 and 6, park-facing Cascade Park units will command a premium as they over look the park, and have excellent views of the Space Needle. Since these units command premium rental rates, we decided to orient them side by side to maximize density and give more residents park views. Cascade Park also offers an expansive internal courtyard for gathering.

- *Pontius Place*: Pontius Place refers to the residential units on block 10. These residents have closer proximity to the grocer anchor and pharmacy. Additionally, they are one block closer to the water and to Blume's future Yale Campus.



Unit Mix

	Studio	Studio Plus	One Bedroom	TOTAL	Community Features
Yale Place	91	24	89	**204**	• Situated above vibrant Yale Ave • Four distinct courtyards • 130 units have tranquil exposure to courtyards • Abundant light from glazed exteriors • Various finish packages
Cascade Park	116	28	67	**211**	• Two expansive courtyards • Many apartments overlook Cascade Park • Apartments feature top interior finishes • Courtyards feature social gathering areas • Higher floor apartments feature downtown views • Yard sport areas in Courtyards (Bocce, Horseshoes, etc)
Pontius Place	82	38	144	**264**	• Close to grocer and services of Block 10 • Convenient access to Blume office development • Abundant light from glazed exteriors • Closest access to the water of South Lake • Six distinct courtyards • Various finish packages
	289	**90**	**300**	**679**	**Residential Development Totals**

RETAIL

The Yale Blocks' retail component offers a wide range of goods and neighborhood services to complement the Seattle CBD, the South Lake Union district, and the Cascade neighborhood. Strategic tenant recruitment and placement will spur synergistic retail strength. Careful utilization of corner spaces and optimum placement of anchor tenants will create unique retail frontage that brings life and activity to the streetscape. There will be 133,000 SF of street level retail with an additional 30,000 SF from the adaptive reuse of the historic Supply Laundry building. The target markets of our retail mix include employees and students, South Lake Union residents, and destination shoppers.

The various sections of our retail development work together cohesively. However, each section exhibits a slightly different function:

- *McMenamins Supply Laundry:* The historical façade and smokestack of the Supply Laundry building will serve as a defining marker in the SLU neighborhood. We anticipate that the McMenamins bar and restaurant will not only draw workers and residents from the immediate vicinity, but also residents from the greater Seattle CBD.

- *Day specialty / office complement:* The northwest corner of block 10 will provide important services for SLU office workers (e.g., those working at Blume's Yale Campus, Amazon, and Microsoft) as well as SLU residents. For this corner, we will recruit national tenants such as FedEx Kinkos, Fidelity Investments, United Parcel Service, as well as cleaners, dentists, and other service providers.

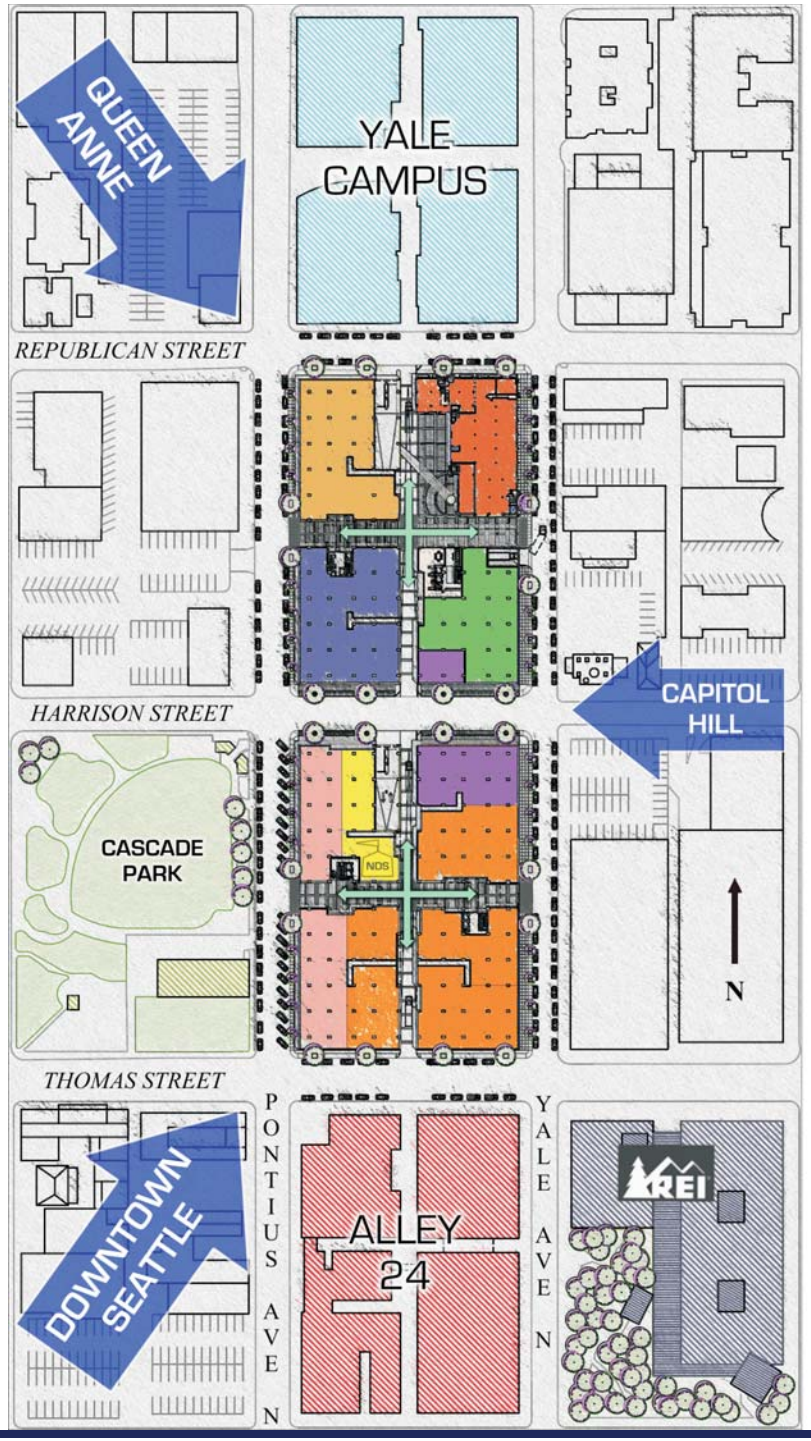
- *Anchor tenants (Trader Joes and Bartells):* The southern half of block 10 houses anchor tenants Trader Joes and Bartells Pharmacy. By placing these much needed community anchors in this location we strategically draw foot traffic northward up block 11 and the southward down block 10. This increases the value of these retail spaces. Additionally, Trader Joes strengthens the neighborhood, and Bartells and Trader Joes both support each other.

- *Active alleys (including New Discover School):* Blocks 10 and 11 will each have one pedestrian alley that runs east-west. Our long term vision is to tenant the alleys to become vibrant, safe shopping and gathering zones. In anticipating a future of small shops and retail frontage, we are utilizing glass facades, not tilt up concrete in the alleys. We are placing the New Discovery School in block 11's east-west alley. In this way, children from the school have a safe, protected egress, and direct access to Cascade Park. The one-way automobile alleys run north-south through the length of the Yale Blocks. These alleys serve several functions. First, they connect the alleys of Alley 24 and Blume's future Yale Campus. Second, like a traditional alley, they provide for delivery and pickup areas for retailers.

- *Restaurants:* Pontius Avenue on block 11 has engaging and inviting frontage onto Cascade Park, a perfect location for restaurants. We plan to recruit a handful of established and up-and-coming restaurateurs and fast eateries into this section. Our intent is that these tenants' clientele will spill out onto the sidewalk creating an inviting European-like outdoor/indoor space.

- *Local retailers:* The southern half of Harrison Street will stay consistent with the green street theme. We have chosen to recruit local tenants to fill these quaint spaces. We plan to create a unique, vibrant, creative line of shops in this lush tree-lined area.

- *Alley 24 Extension*: Yale Avenue on block 11 and Thomas Street facing Alley 24 will join forces with Alley 24's retail. Various clothing, furniture, and accessory shops will line these blocks. This strategy allows us to achieve a critical mass of retail shops targeted primarily at the REI demographic, making these blocks a destination shopping experience, and therefore benefiting all of the retailers leasing these spaces.



target retail tenant positioning

- BLUME'S YALE CAMPUS
- McMENAMIN'S SUPPLY LAUNDRY
- DAY SPECIALTY/OFFICE COMPLEMENT
- ANCHOR PHARMACY - BARTELL DRUGS
- ANCHOR GROCER - TRADER JOES
- ACTIVE ALLEYS
- NEW DISCOVERY SCHOOL
- RESTAURANTS
- LOCAL RETAILERS
- ALLEY 24/REI RETAIL EXTENSION
- ALLEY 24

To achieve our desired retail dynamic, we will target best of breed national, regional, and local credit-worthy tenants that encompass the characteristics we seek. The desired retail mix is specified on the following page.

Many of these retail tenants will cater to residents of the Yale Blocks. In this way, we minimize the need to provide non-revenue generating common areas to the residential tenants (e.g., FedEx Kinkos instead of a Yale Blocks office center). Private retailers will provide a higher level of service than common area services are able to provide, creating benefits for both residents and retail tenants.

Our team confirmed with CB Richard Ellis' commercial brokerage division that retail vacancy in the Seattle market is currently approximately 3%. CBRE also provided us with an estimated lease-up period of nine months. Conservatively, we are budgeting twelve months in our cash flow model to achieve stabilized retail rent.

Tenant	Size (SF)	Rent/SF/Yr	Rent/MO
Grocery Anchor	12,765	$28.00	$29,785
Pharmacy	12,000	$32.00	$32,000
Discovery Center	8,000	$16.00	$10,667
McMenamins	35,286	$30.00	$88,215
All other retail	95,595	$35.00	$278,819

Tenant	TI/sf	Size (SF)	total cost
Grocery Anchor	$45	12,765	$574,425
Pharmacy	$35	12,000	$420,000
Discovery Center	$15	8,000	$120,000
McMenamins	$27	35,286	$952,722
All other retail	$35	95,595	$3,345,825

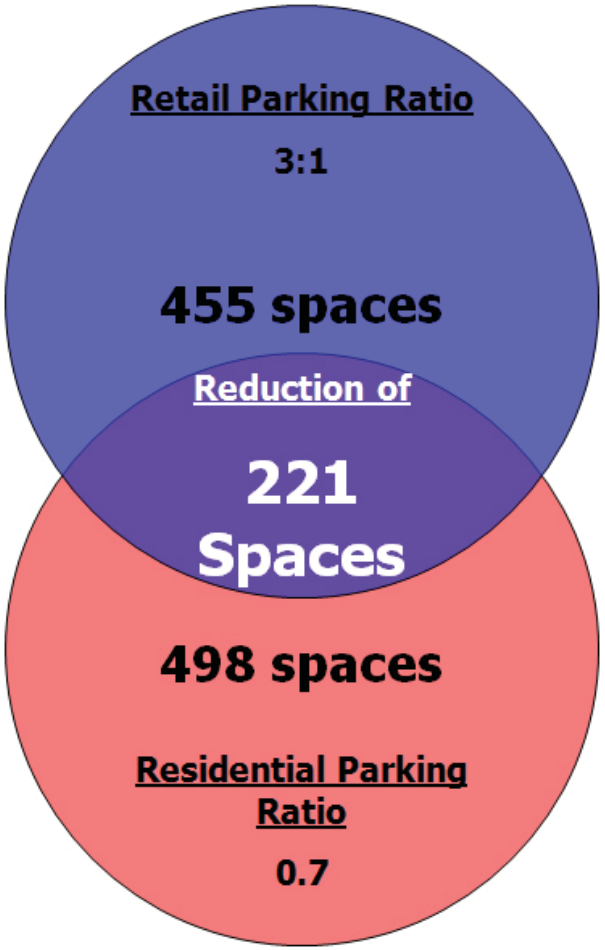
Yale Blocks Retail Mix

Category	Target Tenant/Example		Est. Space of Mix % of Total	Est. Space of Mix Total	Rent Target (PSF/YR)
Anchor - Grocer	Trader Joes		8%	**12,765**	**$28.00**
Pharmacy	Bartells		8%	**13,500**	**$32.00**
Supply Laundry Building	McMenamins		18%	**30,000**	**$30.00**
Day Specialty/Office Complement	Quiznos	GNC	13%	**21,500**	**$35.00**
	Chipotle	Florist			
	H&R Block	Fedex/Kinkos			
	Bank	Insurance			
	Starbucks	Real Estate Office			
	Shutterbug	Orthodontics			
	Fidelity Investments	Gentle Dental			
	Optometrist	Dry Cleaner			
Local Retailers	Spa	Apparel	9%	**15,381**	**$35.00**
	Café	Antique Shop			
	Liquor Store	Wine & Cheese Bar			
	Barber/Salon	Yoga			
Restaurants	Sports Bar	Typhoon	15%	**25,000**	**$35.00**
	Macaroni Grill	Local Restaurants			
	California Pizza Kitchen	Sinjo Sushi			
Alley 24/REI Retail Extension	NAU	Columbia	23%	**37,500**	**$35.00**
	Lucy	Nike/New Balance			
	Sunglass Hut	West Elm			
	Sur La Table	Noah's Bagel			
	Paradise Café & Bakery	Peet's Coffee & Tea			
	Panera Bread	Cold Stone Creamery			
	Moonstruck Chocolate	Cellular Sales			
	Jamba Juice	Urban Monkeys			
New Discovery School	New Discovery School		5%	**8,000**	**$16.00**
		Total/Average	**100%**	**163,646**	**$32.36**

PARKING

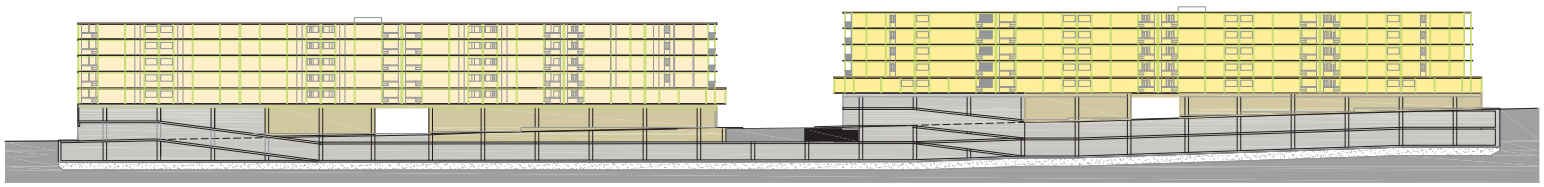
The overriding objective of our parking plan is to maximize the potential retail and residential density above. By creating a large, connected, 1.5 floor parking structure, we are able to achieve 732 spaces. Using a shared parking strategy, 0.7 parking spaces per residential unit, and 4 spaces per 1,000 SF of retail, we are able to create a very dense development above – 679 residential units and 163,000 SF of retail space at a minimal parking cost – far less expensive than if we had created two separate garages, one on each block. Separate garages would also have prevented one connected shared parking pool. Viewed in another way, with an identical residential and retail development above, and a traditional, non-shared, reserved parking system below, we would have needed an additional 221 spaces, which would have cost in excess of $5.9mm.

Several constraints prevented us from building parking beneath the entire block 10. First, we would have needed to move a pressurized sewer line that runs down the length of block 10's north-south alley. Contractors advised us on the costs and potential construction risks of such a project. We determined this procedure was cost prohibitive. Second, we needed to maintain the basement of the historical Supply Laundry building intact to preserve its structural integrity.



SECTION - LEGEND

- Parking
- Retail
- Pontius Place Apart.
- Cascade Park Apart.



SECTION - THRU PARKING GARAGE ENTRY RAMPS

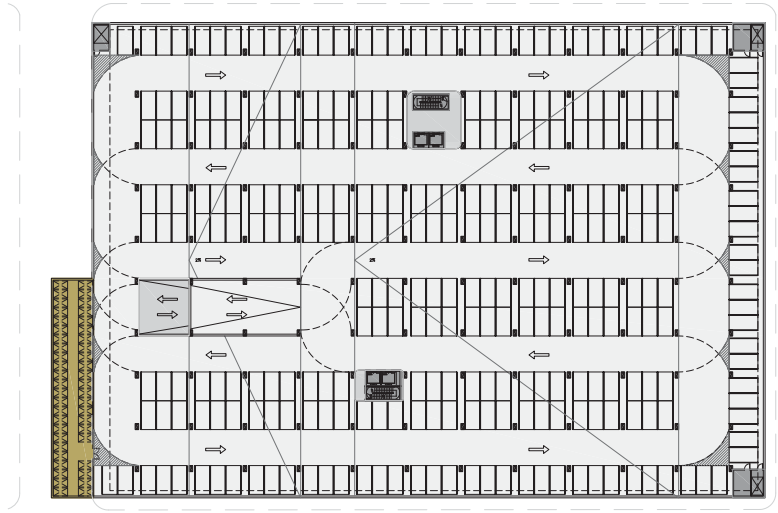
0 25 50 100

The smaller top floor of the parking garage runs parallel to the exterior grade of the site at a 2% slope. The top floor egress is on Harrison Street. Because of the site's slope, we were able to create a parking floor plan that allows almost the entire block 11 to contain parking beneath the retail level.

The larger bottom floor of the parking garage covers 1.5 city blocks, and has the same 2% slope as the exterior grade. The bottom plate has 434 spaces, and the top plate has 298 spaces. There are 93 storage units (42 SF ea.) for the residential apartments, located strategically so as to maximize space efficiency. Parking spaces are 8.5' by 16' with allowances to increase depth for large vehicles per code. Drive lanes are at 20' to 24' wide. There are two egresses for the bottom plate – one is located on Republican Street, and the other is on the top parking floor of block 11.

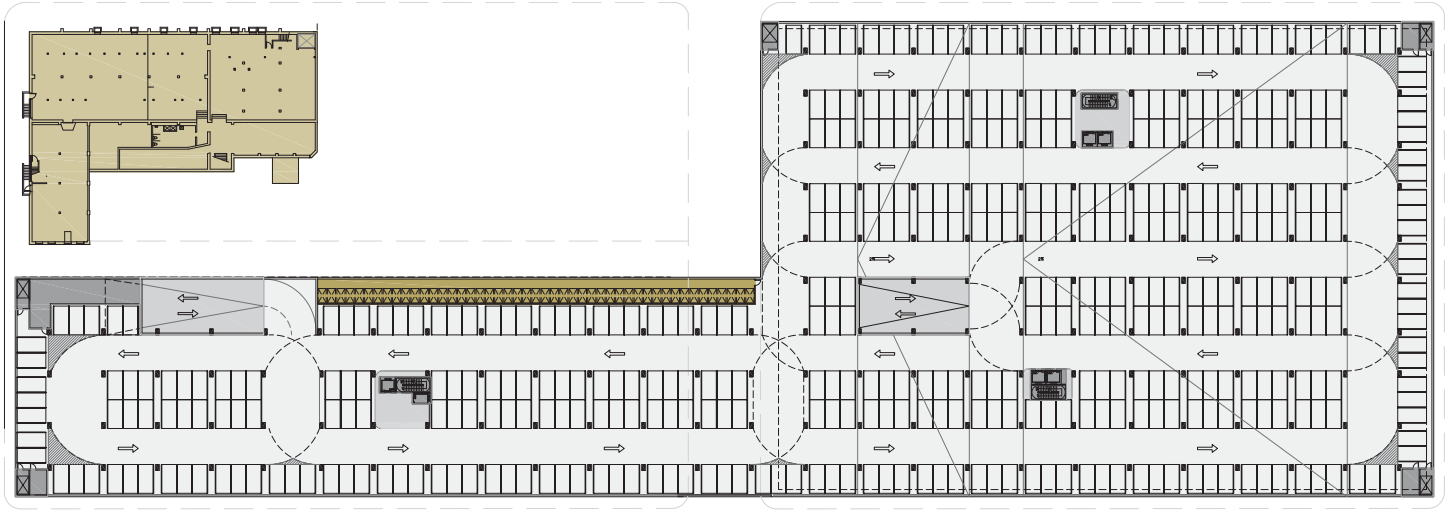
PLAN - LEGEND

- Parking
- Storage Units (apartment residents)
- Retail (basement of Laundry Supply)
- Mechanical / Equip. Rm



1 LOWER LEVEL 1

0 25 50 100



1 LOWER LEVEL 1B

0 25 50 100

By designing a large, multi-block, below grade garage we reduced the number of ramps and retaining walls. As a result, we increased our efficiency to 315 SF/space, 25% more efficient than the average 400 SF/space. That leads directly to cost efficiencies of similar magnitude. With an 18-foot elevation drop from the SE to NW corner of the site, we decided to take advantage of the grade difference for reduced excavation and increased accessibility with fewer internal ramps.

We anticipate that at certain busy retail times (e.g., evenings and week-ends) parking demand may stress parking resources. In these situations, overflow parking will be available in PEMCO's garage opposite the Yale Blocks. Since Vulcan has an excellent working relationship with PEMCO, having purchased blocks 10 and 11 from them, we anticipate the ability to create a split fee structure between Vulcan and PEMCO, and have Vulcan cover operation and maintenance of PEMCO's parking facility when used by Yale Block customers.

The Yale Blocks' parking rates will be comparable to surrounding developments. We anticipate that retail parking rates will be the similar to REI's, (i.e.: $2 for 1-3 hours, $5 for 3-5 hours, $12 per day). In terms of residential rates, we plan to stay consistent with Alley 24, which currently offers residents a parking space for $130 per month (in today's dollars), although we conservatively used $125 in our model.

PHASING PLAN

Our site and development program offers excellent phasing potential. The parking will all be constructed at once. Our plan then is to phase Yale Blocks' retail construction and lease-up in the following manner:

Creating four quadrants within each block allowed us to consider various phasing options. Several factors determined our phasing strategy:

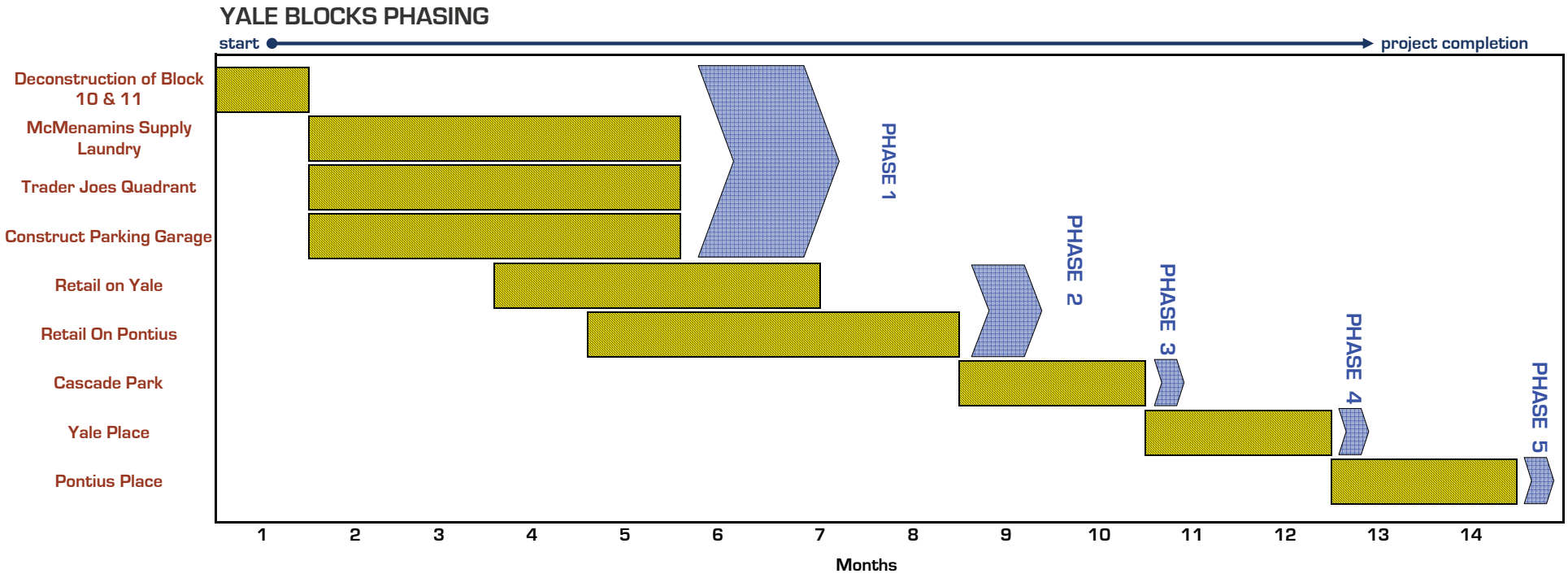
- *Phase 1*: Deconstruction of the existing buildings on blocks 10 and 11 defines the beginning of phase 1. After this activity is underway, we will begin excavating both blocks, with the exception of the eastern half of block 10, to build the garage. While the excavation and garage concrete work is occurring, McMenamins will begin its historic rehabilitation of the Supply Laundry building. Simultaneously, we will build out Trader Joes' space. Building our spaces in this manner allows us to create space for our anchor grocer and McMenamins quickly, thus increasing the value of the remaining retail spaces.

- Phase 2: We plan to build the garage from south to north. By constructing the garage in this order, we are able to begin construction and lease-up of block 11's Yale retail stretch quickly. Completing this section of retail before Pontius is

critical, as Yale's retail plays off the existing strength of Alley 24 and REI. Additionally, Pontius' retail is largely dependent on Yale retail strength.

- Phase 3 – 5: Once all the retail development has been constructed, we are able to construct our modular housing atop. One of the benefits of modular residential construction is the ability to adjust our phasing to meet market demands. We will build the Cascade Park residential community first, given that its units command a park view premium. Next, we will build Yale Place and Pontius place in succession. Timing construction of these units will depend on reasonable assumptions of residential absorption rates.

Within our phasing strategy, we aim to provide a seamless transition for the school from its current location on block 10 to an interior space on block 11.

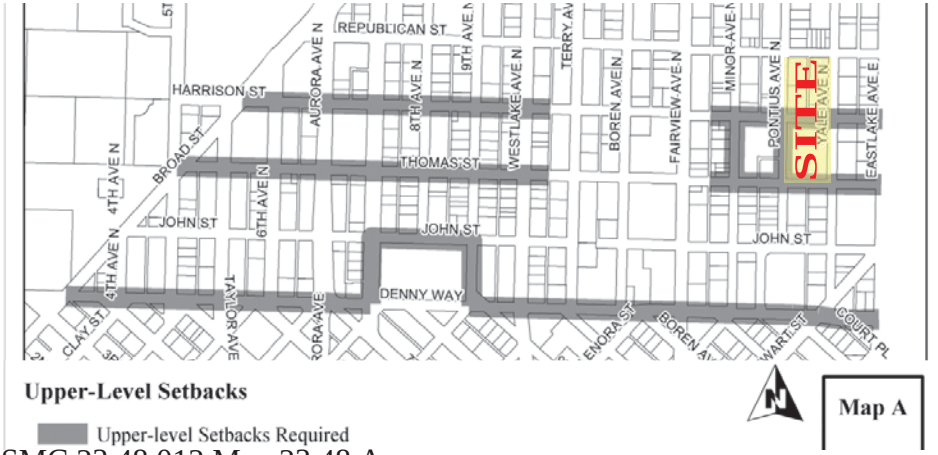


3. DESIGN

RESIDENTIAL

Design drivers: The driving design factor of our residential component is the use of modular units instead of site built construction. By using Unico Properties' Inhabit modules, we are able to meet the density requirements and program mix while still providing valuable open space. Driving unit arrangement and overall massing of the building is the requirement to stack the unit cores on top of each other. Unit cores contain supply water, gray and black water drain pipes, and electrical wiring. As long as these cores align, different sized units can stack atop of one another provided the set-back restrictions are maintained. The units' open floor plans and orientation in all three residential communities (Yale Place, Cascade Park, and Pontius Place) enable us to create open courtyards for natural light and cross ventilation in every unit.

The Yale Blocks' site is restricted by the setback requirements of Seattle's green streets. Special setbacks are required along Thomas Street, Harrison Street, and Pontius Ave (only along block 11). Seattle's code indicates that any part of the structure shall be set back one foot for every two feet of height above 25 feet – up to a maximum setback of 15 feet. Our retail spaces are already set in from the property line at the ground floor in order to provide space for the swale on Yale and to increase sidewalk width for retail shoppers. At the top (5th) residential floor, our building height is 63' above grade, which translates to the maximum 15' setback from the property line for apartment floors 2-5 (63'-25'=38'/2=19' or max. 15').



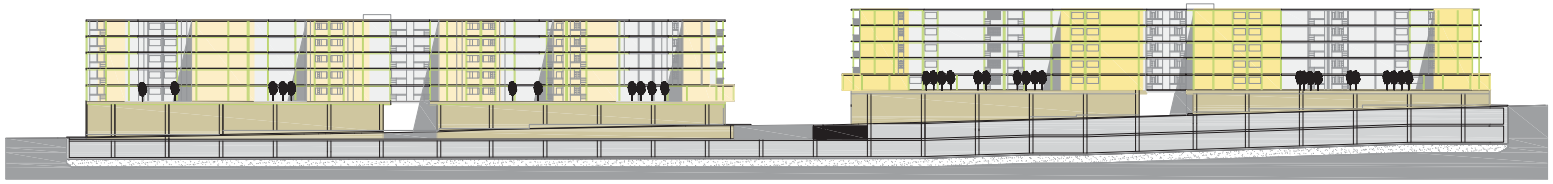
SMC 23.48.012 Map 23.48 A

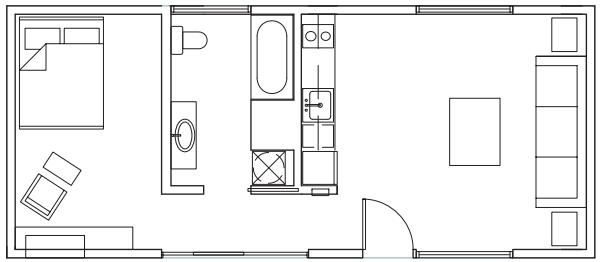
Floor plan and Features: Unico's Inhabit modules are designed to attract young, professional, creative class, echo boomers, as Unico refers to them. The majority of individuals in this demographic category are attracted to clean, modern, urbane, and green designs.

In our project, we have modified the design of Unico's model by rotating the central core by 90 degrees. Consistent with the original plan the central core divides the bedroom and living space. However with our design pocket doors allow the bathroom and kitchen to be closed off when not in use. When open they maintain direct visual connection across the whole space, enlarging its effective size and distinguishing it from typical box-like studio units. In addition floor-to-ceiling operable windows on both sides of the unit further increase the perception of open space and create natural cross ventilation in every unit – a feature that

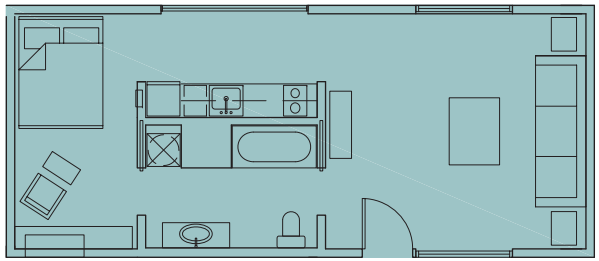
SECTION - LEGEND

- Parking
- Retail
- Pontius Place Apart.
- Cascade Park Apart.
- Courtyard





UNICO'S STANDARD MODEL



YALE BLOCK'S STANDARD MODEL

few competitive units offer. To further emphasize the clean lines, each unit is clear of plumbing runs as these are concealed within the core. Additionally, energy-efficient in-wall air-to-air heat pumps eliminate the need for heating ducts. Appliances are all Energy Star-certified and lighting fixtures are LED bringing down the total electricity cost.

Walkway Structure System: A sturdy steel structure equipped with elevators and stairs, provides circulation to the units and frames the courtyard and individual unit balcony/entry ways. In this way the metal system provides a secondary layer to the façade and provides greater depth which is further accented and detailed with wood-screened louvered panels. These panels provide excellent privacy for the units and permit opportunities for considerable variation in the facades. The steel structure also lends additional shear support to the buildings. The covered, open air structure will reduce operational costs for Vulcan because there is less common area to be heated.

Courtyards: Each open courtyard looks down upon a green roof. Native vegetation covers the raised planters and frames the vertical transportation systems (elevators and stairs) and casual meeting zones. Here residents can mingle in protected covered spaces open to the courtyards. The green roofs also effectively conceal storm water management filters and equipment housed below. This is a great benefit to the residents as it provides ample exposure to outside air, but it also creates an attractive view from their units, and benefits the overall development in obtaining LEED points for storm water design and water efficient landscaping. LEED points for storm water design and water efficient landscaping.

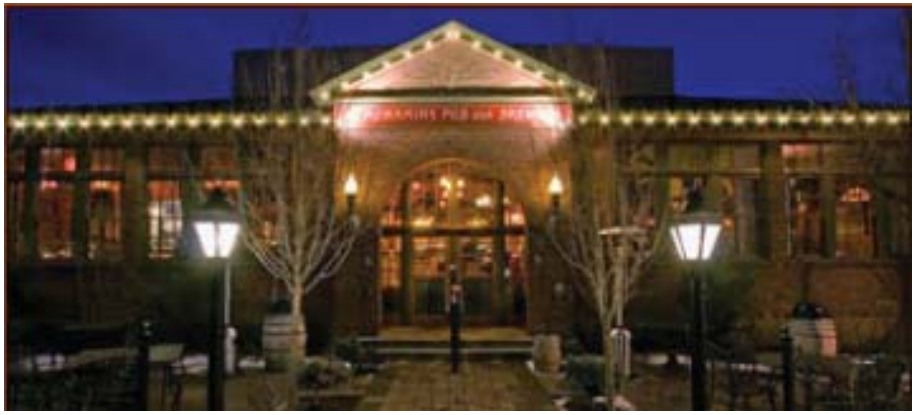
RETAIL

The Yale Blocks' retail spaces will be concrete buildings with a glazed curtain wall and post-tensioned concrete roof. This ceiling/roof will serve as the podium for the residential units above. The retail space ceilings will be 20 feet tall, giving retailers open airy spaces and opportunities to utilize mezzanines.

One of the primary forces shaping the context of our two retail blocks is the use of north-south and east-west alleys. By reproducing the bisecting alley pattern of Vulcan's Alley 24 and Blume's future Yale Campus, we are completing the link within the district, and tying the Yale and Pontius together. The pedestrian alleys on blocks 10 & 11 allow pedestrians greater penetration through the project and create a more walk-able scale. These alleys will be enlivened with attractive lighting that will adjust to the hours of the day and a tall (20 foot) floor-to-ceiling height to create a more open feel. Additionally, light wells from the courtyards above will bring natural light into these alleys. Like Alley 24, the alleys will be supported by attractive retail storefronts and modern, protected, but urbane residential lobby entries. Sidewalk furniture will line the alley, creating an environment in which people can casually meander. The alleys provide intermittent framed views to the park and Harrison Street, the neighborhood's new green street. Native planting will line the automobile alleys and vines will climb up trellises and screens along them.

Harrison Street will receive the necessary improvements to meet green street requirements. This includes widened sidewalks and minimal curbs to allow for open space and greenery. This street will also clearly display the use of 'green' infrastructure by maximizing the use of street tree coverage for storm water interception, as well as temperature mitigation and air quality improvement. Retailers on this street are encouraged to take advantage of the setting and offer outdoor seating or sales when climate permits storm water interception as well as temperature mitigation and air quality improvements. Retailers on this street are encouraged to take advantage of the setting and offer outdoor seating or sales when climate permits.

The Supply Laundry building offers an excellent opportunity to create a historical neighborhood marker. McMenamins is experienced with handling such historic preservation projects in a way that honors and celebrates buildings' former lives. In this case, Yale Blocks' architect will work closely with McMenamins to ensure that the open seating area under a glazed atrium roof around the smokestack emotes the appropriate tone for the neighborhood. We magnify the importance of the historic and iconic marker of the Supply Laundry building by lighting the smokestack, building the atrium and protected plaza onto which at least two levels of the brew pub overlook and into which they flow and spill.



4. DEAL STRUCTURE

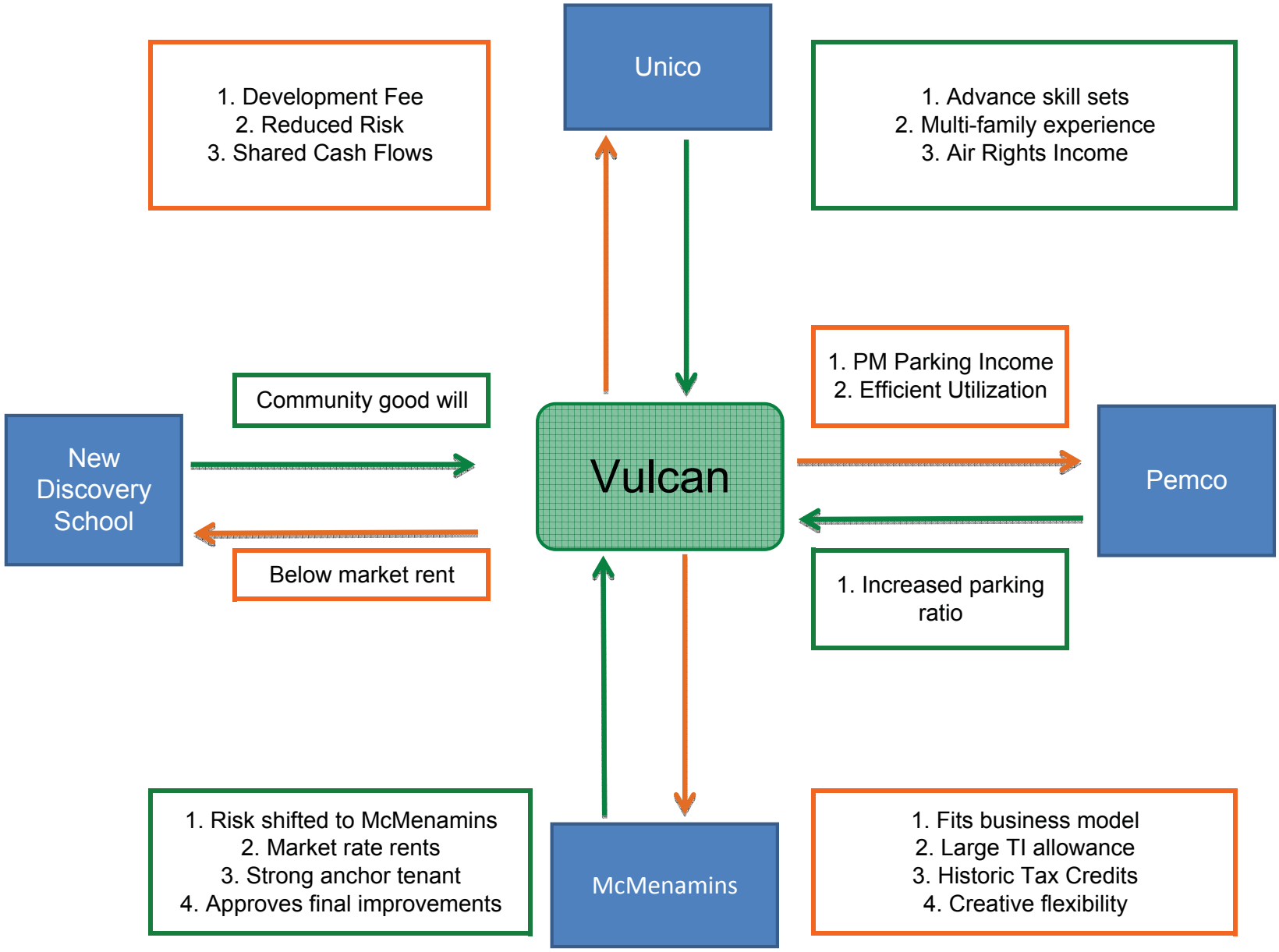
One of Vulcan's primary development strategies is to develop and retain ownership of its properties. Vulcan's holding strategy perfectly matches their South Lake Union developments, since the full potential of the South Lake Union district, including blocks 10 & 11, may take many years. Vulcan is the primary equity investor in its projects, investing cash up to approximately 25% of the total development costs, typical of a long term develop-and-hold player. In the Yale Blocks development, $23.6 million of the equity is imputed – derived from the difference of today's market value ($48 million) and actual purchase price ($24.4 million). Additionally, $5 million of working capital will be invested up-front by Vulcan.

The remaining portion of the development costs ($138,715,633) will be financed by an institutional lender. The assumed terms of the financing are a 10-year note at 6.375%, amortized over 25yrs.

Unico: Our team proposes that a development agreement be negotiated with Unico in the development of the modular multi-family units. Unico has a holding strategy similar to Vulcan's in that Unico develops and holds its properties for long time periods. As long as Unico has a positive spread between its cost of money and return on costs, Unico can develop modular workforce housing. With a mortgage constant of 8.01% and a return on cost of 8.04% in the stabilized year, Unico could proceed according to its strategy. Unico brings a competitive advantage to the success of the project. The company has extensive experience in development, ownership, and management. Its property holdings total over seven million square feet of premiere office, medical office, and multifamily units located throughout the western United States. Unico has invested over a million dollars in research and development on modular units combining the design and construction expertise of local architecture firms Mithun, HyBrid, and contractor RAFN Construction in developing the Inhabit modules. A potential residential deal structure between Vulcan and Unico could be arranged in one of two ways, or a combination:

1. *Vulcan leases air rights to Unico.*
   In this scenario, Vulcan carry's the construction financing for building the underground parking and retail spaces, but would lease the air rights above the retail to Unico. This deal reduces Unico's risk in several ways. First, adequate parking (0.7 parking ratio) would already be available to the modular units at no direct cost to Unico. Rather, the parking cost would be absorbed by Unico's tenants. Second, above the retail, a podium would be provided upon which Unico could stack its modular units. Vulcan would deliver a finished ready-to-build site to Unico, thus greatly reducing any of Unico's site development costs. From Vulcan's perspective, an air rights lease permits Vulcan to enjoy a growing income stream from the air rights without risking residential development and absorption of an innovative modular building type.

2. *Vulcan develops and finances the entire project and structures a development fee with Unico, employing Unico's expertise in the development of the modular units.*
   In this deal structure, a development management agreement is negotiated in which Unico develops the multifamily component of the property on a fee basis. Once Vulcan's established hurdle rate is met on the multifamily component, any excess proceeds could be shared between Vulcan and Unico in a negotiated manner. This deal can be attractive to both parties. First, it greatly reduces Unico's risk and cost outlays. Second, Unico will earn a development management fee while participating in the growth and success of the project. For Vulcan, the company advances its technical skills and working knowledge of the modular unit systems at a greatly reduced level of risk.


Unico
1. Development Fee
2. Reduced Risk
3. Shared Cash Flows
1. Advance skill sets
2. Multi-family experience
3. Air Rights Income
Community good will
New Discovery School
Below market rent
Vulcan
1. PM Parking Income
2. Efficient Utilization
Pemco
1. Increased parking ratio
1. Risk shifted to McMenamins
2. Market rate rents
3. Strong anchor tenant
4. Approves final improvements
McMenamins
1. Fits business model
2. Large TI allowance
3. Historic Tax Credits
4. Creative flexibility

Development management: We believe that management of the retail should be consistent with Vulcan's Alley 24 on-site management program which is managed by CBRE. We also propose parking management remain consistent with Vulcan's Alley 24 program and be managed by Standard Parking.

PEMCO parking: We propose that an agreement with PEMCO be negotiated, so that the Yale Blocks has access to PEMCO's 291 spaces (four-level parking structure and surface lot) for after hours use. These spaces will enlarge the effective parking supply for evening and weekend retail and dining patrons and provide a 4:1 parking ratio for the retail/ restaurant space. While a PEMCO/Vulcan agreement can be negotiated in several ways, we suggested that Vulcan absorb the operating expenses of the parking structure after hours as well as share a portion of the proceeds generated from parking revenues. We believe this to be beneficial because PEMCO currently utilizes the parking structure only during office hours. At all other times, the structure remains vacant. Evening and weekend use increases the structure's efficiency and income-generating potential, and more parking is added to the shared parking pool in the evening to support the local retail and promote increased retail density.

New Discovery School: An arrangement will be made to seamlessly relocate the New Discovery School (NDS) in 8,000 SF of the ground floor retail program at below-market lease terms of approximately $16/SF (NNN). Given the school's 501(c)(3) non-profit status and high ratio of operating costs to revenues, this rate is within the organization's budget and will allow the school to remain in this growing neighborhood. In exchange for a favorable rent to NDS, the school will allow community meetings to take place on its premises outside of school hours. This will positively benefit the Cascade community by providing a space to gather and discuss community issues.

McMenamins and the Supply Laundry Building: We propose that a deal be negotiated to lease the Supply Laundry building to McMenamins, Inc. – a Portland-based company. We spoke with McMenamins' executive management, and they expressed strong interest in the Supply Laundry building for a combined brew pub and spa. McMenamins is a pub operator with locations in Oregon and Washington. They operate venues that offer music, movies, pubs, Turkish baths, brewing, lodging & spas, with three locations in Seattle. Leasing to this tenant would be a win-win for McMenamins and Vulcan:

Benefits to McMenamins:

- *Consistency with its strategy*: According to McMenamins management, one of their most important selection criteria when choosing new venues is the historic appearance of the property and the property's historical context within the neighborhood. The existing historic finishes of the building play to McMenamins strengths as does the building's approximate 30,000 SF size. The company currently operates a number of establishments similar in size.

- *Plays to tenant's strengths*: We propose that the $5 million originally earmarked for interior remodeling and seismic upgrades be utilized for seismic upgrades with the remainder given to McMenimins as a large tenant allowance against a market-rate lease for development. McMenamins can manage its own tenant improvements, subject to Vulcan's approval. This is a benefit to McMenamins because it will have a property that plays to their strengths as well as have a large tenant improvement allowance which should cover most of their development costs. Since McMenamins has been involved in dozens of historic renovations, it understands this process well and can attain efficiencies.

Benefits to Vulcan and community:

- Obtains market rents and avoids risks: Vulcan benefits from this arrangement because it will obtain a tenant that pays market rate rents, undertakes development risks, and leases a large retail pace that would otherwise need to be divided.

- Unique tenant adds to neighborhood and development: The neighborhood and Vulcan will have a unique, larger tenant that helps establish and solidify the identity of the neighborhood. According to McMenamins, the company targets and attracts a variety of demographic groups, but is especially strong among the creative class professional workforce that will be working and living in this area.

We also propose that McMenamins work in conjunction with its architect to receive placement on the National Historical Register. By doing this, the building will receive a 20% credit of in-basis costs ($5 MM), or approximately $1 million. This tax credit, while technically owned by Vulcan will be allocated between Vulcan and McMenamins. This will allow Vulcan and McMenamins to potentially invest more equity into this building.

While we have already spoken with McMenamins' senior executives about this building, we have also prepared a backup plan should this lease not be secured. Our second choice would be to split the space up into two restaurant/bar areas that would target a wide ranging market including businesses, residents, and destination shoppers.

Yale Blocks Deal Structure

Project Costs	Amount	%
Land	$24,375,000	14%
Acquisition of Block 10	$14,875,000	9%
Acquisition of Block 11	$9,500,000	5%
Hard Costs	$87,004,256	50%
Soft Costs	$29,482,870	17%
Finance Costs	$6,800,000	4%
Contingency	$7,800,018	4%
Demo	$319,896	0%
Tenant Improvements	$5,412,972	3%
Street Improvements	$509,060	0%
Developer Fee	$4,659,525	3%
Sales Tax	$7,029,944	4%
Total Costs	**$173,393,541**	**100%**

Capital Structure	
Equity	$34,678,908
Construction Debt	$138,715,633
Total Debt (LTC)	80%
Total Capital	20%
LTV	60%

EGI:	
Residential	$11,624,178
Parking	$1,204,051
Retail	$5,942,916
Total Income	**$18,771,145**

Expense:		% EGI
Residential	$3,487,253	30.00%
Parking	$97,245	8.00%
Retail	$1,237,197	17.30%
Total Expenses	**$4,821,695**	

NOI	$13,949,450

Return Analysis	
Return on Cost	8.04%
Equity IRR (36 months)	55.00%
Equity IRR (120 months)	23.01%

Average Debt Service Rate	1.26
LTC	80%
LTV	60%

5. ECONOMIC MODEL

PRO FORMA OPERATIONS

Residential Assumptions:

- *Rental rates*: Based on comparable properties in the market, we believe our apartment units will rent for between $2.50 and $2.75/ SF. These modular units are unique to the market, have superior amenities, natural light and cross ventilation, which we believe justifies these rents.

- *Vacancy:* We assumed a market vacancy of 5% based on supplemental appraisal information that was provided in the RFP. We also received information from an MAI appraiser and an experienced multi-family investor supporting this assumption.

- *Operating expenses*: Operating expenses are estimated at 30% of EGI, which is more conservative than Ally 24's 28% of EGI. Due to the highly efficient design of the modular units, we believe stabilized expenses may be significantly lower than 30% of EGI; however, since there is no modular development comparable available we conservatively chose the higher expense estimate.

Retail Assumptions:

- *Rental rates*: The rent for the retail space is based on several factors: interviews with commercial brokers in the Seattle market, comparisons to similar properties around the neighborhood, and future growth/desirability of the property.

- *Tenant improvements*: We estimate average tenant improvements (TIs) at $33/SF based on providing a vanilla shell to each tenant. Our estimates originate from conversations with two local contractors. The TIs for the Supply Laundry building are lower than for the rest of the retail spaces, because we are utilizing the $5 million seismic upgrade / historic remediation budget as a tenant allowance for this space. Our proposal assumes McMenamins will occupy this space and will require an additional tenant allowance of $27/SF.

Financial Assumptions:

- Going-in capitalization rate: We assumed a going-in cap rate of 6.00%, which was confirmed by the land value appraisal received in the RFP package. This was also confirmed by Norris Beggs & Simpson.

- *Going-out capitalization rate*: We assumed a going-out cap rate of 7.00%. We think that a 1% increase in cap rate is conservative for a property of this caliber. This estimate was also confirmed by Norris Beggs & Simpson.

- *Construction financing*: Construction financing is assumed to be 250 basis points over the 1-month LIBOR rate. We assumed a LIBOR rate of 4.00% which represents a significant premium over the trailing 12-month rate.

- *Permanent financing*: We assume the permanent financing of 6.375% (262.5 basis points over the current 10-year Treasury rate) will take out the construction loan. The lending market is tightening and options available to larger developers have diminished. Conservatively, we need a 60% LTV in order to lock in the best long term rate. We assume our permanent loan will be a 10 year term amortized over 25 years. Numerous financing institutions, including JP Morgan-Chase, Norris Beggs & Simpson, and StanCorp Mortgage Investors, have confirmed this information.

SENSITIVITY AND RISK ANALYSIS:

Vulcan Equity Contribution: Building in a margin of safety, we assumed Vulcan's capital contribution into the project would be 20% of total development costs. Vulcan indicated it could contribute as much as 25%. Team mentors suggested that Vulcan's contribution could be in the form of imputed equity in the land and an additional $5MM in working capital.

Absorption: We stressed the economic model to test absorption risk and found that if we extend the absorption period by 24 months, the IRR drops to 14.27%. The project would still achieve the 8% margin on cost hurdle, but would not achieve the 15% to 18% IRR requirement.

Interest Rate: After speaking with construction lenders at JP Morgan-Chase and Norris Beggs & Simpson, we believe that we can obtain our proposed construction loan. There would be no need for bridge financing which saves considerable financing costs. Interest rates have been unstable recently. The trailing 12-month LIBOR rates range widely between the current rate of 3.14% and 5.72%. The following table shows the range in LIBOR rates and the corresponding interest accrued over the construction period. Due to the pre-manufactured design of the Inhabit units, we mitigate the majority of this risk by having a pre-negotiated manufacture price per unit prior to construction. A rise in interest rates will increase financing costs. We control this risk with guaranteed maximum price contract which ensures the most efficient construction time line. The development budget includes a reserve for interest expense of $4.65MM, which we believe is sufficient to cover market volatility.

Managing our risks will be critical to the achievement of these financial results:

- Construction Risk: We will mitigate construction risk by building units in controlled conditions in the Transform factory less than an hour away from Seattle in Burlington, WA. The short time frame for unit production means that we reduce or eliminate a construction loan for the modules and use factory financing until delivery. Then, we place a permanent loan upon delivery and connection at the site. Our risk will also be reduced by working with a negotiated guaranteed maximum price contract reducing financial risk with periodic cost estimation monitoring during the design phase. We included an 8% hard cost contingency and a 2% soft cost contingency. Our project would have to go over budget by more than 14% for returns to be less than Vulcan's hurdle rates referenced above.

- Market Risk: A downturn in the economy could adversely affect the entire retail and upscale workforce apartment market. We mitigate this systemic risk by phasing our project. This allows the possibility of adapting the program to fit the changing needs of the local economy. Also, producing a higher quality product in a rapidly developing area mitigates a possible market downturn.

1-M LIBOR	Spread	RATE	Construction Interest Inhabit	Construction Interest Site Built	Interest Savings as Compared to Site Built Construction
5.00%	2.50%	7.50%	$ 11,328,443	$ 16,183,490	$4,855,047
4.75%	2.50%	7.25%	$ 10,923,856	$ 15,605,509	$4,681,653
4.50%	2.50%	7.00%	$ 10,519,269	$ 15,027,527	$4,508,258
4.25%	2.50%	6.75%	$ 10,114,682	$ 14,449,545	$4,334,863
4.00%	**2.50%**	**6.50%**	$ 10,519,269	$ 15,027,527	**$4,508,258**
3.75%	2.50%	6.25%	$ 10,114,682	$ 14,449,545	$4,334,863
3.50%	2.50%	6.00%	$ 9,710,094	$ 13,871,563	$4,161,469
3.25%	2.50%	5.75%	$ 9,305,507	$ 13,293,581	$3,988,074
3.00%	2.50%	5.50%	$ 8,900,920	$ 12,715,600	$3,814,680
2.50%	2.50%	5.00%	$ 8,091,745	$ 11,559,636	$3,467,891

CAPITAL STRUCTURE

First Position Construction Loan: The construction loan is in the first position for funding, but will be dispersed only after all of Vulcan's capital contributions have been paid in. Funds from the construction loan will be dispersed on a draw basis. The construction loan has an 80% Loan to Cost Ratio and a 60% Loan to Value Ratio. During the loan term, the project will be responsible for monthly interest-only debt service. We have included an interest reserve of $5.00 MM in the construction budget to cover these costs. When the project's loan is fully drawn, there will be approximately $770,000 per month in interest due, which is the total debt service per month during construction. Due to the program's efficient design and faster construction, we anticipate a total time savings of eight months compared to traditional stick-built construction. This equates to an approximate savings of $4.6 MM in total interest costs, or $330,000 per month in debt service.

DEVELOPER RETURNS

We spoke with Vulcan, and elicited the following hurdle rates:

1. A minimum 18% ROE on developer's equity, which can be up to 25 % of the total development cost. (actual: 20% of cost, 8.19% ROE).

2. A minimum of 8% Margin on Total Costs (actual: 8.04%).

3. A minimum of 15% to 18% IRR (actual: 23.01%).

The IRR calculation used the actual cost to Vulcan for the land purchase, instead of the market value of the land. We believe that by showing the actual cost to Vulcan and not the perceived value, the IRR calculation is more accurate for decision-making purposes. We received supplemental information from NAIOP's appraiser that suggests the improved land value is $48 MM, with a suggestion that we use this perceived value as Vulcan's equity/capital contribution in the project. We agree that by improving on the land, the value would increase, but we do not agree that the improved value should be considered as our cost basis. The model shows Vulcan paid $24,375,000 to purchase the two blocks and then put in an additional $10.3 MM in capital for a total contribution of $34.6MM which is about 20% of the total development costs. We believe that this is a realistic scenario supported by today's lending market.

RETURNS TO INTERESTED PARTIES

- *Developer/owner*: Vulcan Inc. receives a minimum IRR of 23.01% after a 10 year hold period. If Vulcan chooses to sell the property after stabilization we anticipate the project would sell at a 6.00% cap rate for $231MM, which equates to an 8.04% return on cost in the stabilized year and a 8.19% return on equity. After a ten year holding period, assuming a 2% income increase and a 3% expense increase annually, and going-out terminal rate of 7.00%, we achieve a total development value of $224MM.

Other Income	Units	Per Unit/MO	Per Unit/YR	Annual Income
Retail CAM Reimbursement	-	-	-	$981,876
Pet Fees	-	$40	-	-
Late Fees and Other Income	-	$25	-	-
Storage	93	$50	$600	$55,800
Utility Reimbursements	679	$50	$600	$407,400
Monthly Parking	475.3	$125	$1,500	$712,950
Hourly Parking	256.7	$180	$2,160	$554,472
Total				**$2,712,498**

- *Debt holder*: Debt holder receives market returns on high quality, relatively safe investment with current market leverage ratios. The debt provider will earn 250 points over the current LIBOR rate from an experienced credit worthy large-scale developer borrower.

- *City of Seattle*: Receives increased annual tax revenues of approximately $1.9MM based on property tax rates of $9.26 per $1,000 in value. Additionally, the proposed development will improve urban vitality and stimulate compatible development in the neighborhood and will vastly increase a wide variety of essential goods and services to enhance the quality of life for current Cascade neighborhood residents.

DEVELOPMENT TIME LINE

Construction is estimated to take 14 months. We expect the apartment units to be absorbed at a rate of 23 units per month for 28 months. This is based on the lease up patterns for Alley 24 and Amli Apartments. The manager at Alley 24 said it took about a year to full lease up. A leasing agent for the Amli Apartments said it took about 6 months to lease up. Construction will be phased in such a way that the southern half of Block 11 will have completed construction just as the retail component on the northern portion of the block is completed. Phasing construction in this way will enable the apartment units to start lease up sooner and the project to generate income while construction is still progressing on the other phases. Total construction time from first dig to last brush of paint is estimated to be 14 months. IRR is based on a 10 year time line.

Unit Mix	(SF) / Units	Mothly	Annual
Studio	289	$1,193	$4,135,590
Sudio Plus	90	$1,444	$1,559,250
One Bedroom	300	$1,688	$6,075,000
Apartment Sub Total			**$11,769,840**
Grocery Anchor	12,765	$29,785	$357,420
Pharmacy	12,000	$32,000	$384,000
Discovery Center	8,000	$10,667	$128,000
McMenamins	35,286	$88,215	$1,058,580
All other retail	95,595	$278,819	$3,345,825
Retail Sub Total			**$5,273,825**
Retail CAM Reimbursements			$981,876
Storage		$25	$55,800
Utility Reimbursements	93	$50	$407,400
Montly Parking	679	$50	$712,950
Hourly Parking	475	$125	$554,472
Other Sub Total	257	$180	$2,712,498
Total Income			**$19,756,163**
Apartment Vacancy 5%			($608,862)
Retail Vacancy 5%			($312,785)
Parking Vacancy 5%			($63,371)
Effective Gross Income			**$18,771,145**
Opertating Expenses			
Apartment	30% Apartment EGI		($3,487,253)
Retail	$7.56/sf		($1,237,197)
Parking	$0.40/sf		($97,245)
Net Operating Income			**$13,949,450**
Annual Debt Service			$11,109,745
DCR			1.26

Vulcan's Yale Blocks

PROGRAM UNDERWRITING

Apartment Unit Mix	Units	Avg. Unit Size (SF)	Total Size (SF)	Rent/MO	Total Mthly Rent	Monthly Rent/SF	Annual Rent
Studio	289	450	130,050	$1,193	$344,633	$2.65	$4,135,590
Studio Plus	90	525	47,250	$1,444	$129,938	$2.75	$1,559,250
One Bedroom	300	675	202,500	$1,688	$506,250	$2.50	$6,075,000
Total Potential Gross Income	**679**	**559**	**379,800**	**$1,445**	**$636,188**		**$11,769,840**

Tenant	total cost	TI/sf	Size (SF)	Size (%)	Rent/MO	Rent/SF/Yr	Annual Rent
Grocery Anchor	574,425	45	12,765	7.8%	$29,785	$28.00	$357,420
Pharmacy	420,000	35	12,000	7.3%	$32,000	$32.00	$384,000
Discovery Center	120,000	15	8,000	4.9%	$10,667	$16.00	$128,000
Laundry	952,722	27	35,286	21.6%	$88,215	$30.00	$1,058,580
All other retail	3,345,825	35	95,595	58.4%	$278,819	$35.00	$3,345,825
Total Potential Gross Income	**5,412,972**	**33.08**	**163,646**	**100.0%**	**$439,485**	**$32.23**	**$5,273,825**

Other Income		Units	per unit/MO	per unit/YR	
Retail CAM Reimbursements	-	-	-	-	$981,876
Pet Fees	-	-	$40	-	-
Late Fees and Other Income	17856	-	$25	-	-
Storage	4464	93	$50	$600	$55,800
Utility Reimbursements	-	679	$50	$600	$407,400
Monthly Parking*	-	475	$125	$1,500	$712,950
Hourly Parking*	-	257	$180	$2,160	$554,472
Total					**$2,712,498**
**Parking SF*	*243,113*				

Less: Vacancy & Credit Loss	Retail	**5.00%**	($312,785)
Less: Vacancy & Credit Loss	Apartment	**5.00%**	($608,862)
Less: Vacancy & Credit Loss	Parking	**5.00%**	($63,371)
Total Vacancy & Credit Loss			**($985,018)**

Effective Gross Income - Apartment	$11,624,178
Effective Gross Income - Retail	$5,942,916
Effective Gross Income - Parking	$1,204,051
Effective Gross Income	**$18,771,145**

Less: Operating Expenses	% of EGI	Per Unit	Per SF	Annual Expense
Real Estate Taxes	7.00%	$1,198	$2.14	$813,692
Insurance	4.00%	$685	$1.22	$464,967
Utilities	4.00%	$685	$1.22	$464,967
Advertising & Marketing	2.00%	$342	$0.61	$232,484
Management Fee	3.00%	$514	$0.92	$348,725
Repairs & Maintenance	4.00%	$685	$1.22	$464,967
Administration	3.00%	$514	$0.92	$348,725
Replacement Reserve	3.00%	$514	$0.92	$348,725
Total Apartment Expense	**30.00%**	**$5,136**	**$9.18**	**$3,487,253**
Retail CAM Expenses	13.74%		$6.00	$981,876
Management Fee	3.00%		$1.31	$214,409
Parking Maintenance	1.36%		$0.40	$97,245
Capital Reserves	0.57%		$0.25	$40,912
Totals Retail & Parking	**18.67%**		**$7.96**	**$1,334,442**
Total Expenses	**25.69%**		**$8.87**	**$4,821,695**

Net Operating Income - Apartment	$8,136,925
Net Operating Income - Retail & Parking	$5,812,525
Net Operating Income	**$13,949,450**

Estimated Cap Rate & Value	6.00%	**$232,490,000**
Value/Apartment Unit		**$342,401**
Value/Sq Ft		**$428**

LOAN VARIABLES

Loan to Value			60%	56%	52%
Loan Amount			$138,715,633	$130,045,906	$121,376,179
Loan to Cost			80%	75%	70%
	10-Year T-Bill Index	Spread	Rate	Rate	Rate
Interest Rate	3.75%	2.625%	6.375%	6.375%	6.375%
Term		10 years	120 months	120 months	120 months
Amortization		25 years	300 months	300 months	300 months
Monthly Payment			$925,812	$867,949	$810,086
Annual Debt Service			$11,109,745	$10,415,386	$9,721,027

LOAN ANALYSIS

Debt Service Coverage Ratio			**1.26**	**1.34**	**1.43**
Constant			8.01%	8.01%	8.01%
Loan Per Unit			$204,294	$191,526	$178,757
Loan Per Sq Ft			$255	$239	$223
Principal Balance After Loan Term			$107,123,132	$100,427,936	$93,732,740
Annual Cash Flow			$2,839,705	$3,534,064	$4,228,423
Breakeven Analysis			84.9%	81.2%	77.5%
Maximum Loan Amount at Minimum Mortgage Constant	0.75	10.09%			

CONSTRUCTION ANALYSIS

		PER SF	Return on Cost (ROC)
APARTMENT			
HARD	$55,071,000	$145	
SOFT	$11,394,000	$30	
TOTAL	**$66,465,000**	**$175**	**12.24%**
RETAIL			
HARD	$17,346,476	$106	
SOFT	$5,727,610	$35	
SEISMIC & ENVIRON	$7,500,000	$46	
TOTAL	**$30,574,086**	**$187**	**15.39%**
PARKING			
HARD	$14,586,780	$60	
SOFT	$4,862,260	$20	
TOTAL	**$19,449,040**	**$80**	**5.69%**
Interest Reserve & Loan Fees	$6,800,000		
LAND	$24,375,000	$137	
Demo	$319,896	$3	
Contingency HC	$7,360,340		
Contingency SC	$439,677		
Tenant Improvements	$5,412,972	$33	
Green Street	$109,060		
Harrison Rd Improvements	$400,000		
Developer Fee	$4,659,525		
Sales Tax	$7,029,944		
Total Construction & Finance	**$173,394,541**	**$220**	**ROC 8.04%**
Construction Loan 80%	$138,715,633	*Land-Equity= Vulcan working capital*	**ROE 8.19%**
Equity 20%	$34,678,908	***$10,303,908***	
Potential Net Developer Profit	**$59,095,459**		**IRR - 10 Year 23.01%**

Construction Loan Notes

Construction Schedule in Months	Inhabit	Site Built
Parking	3	3
retail	3	3
apartments	8	14
Total	**14**	**20**

RATE	Construction Interest		Interest Savings
7.00%	11,328,443	16,183,490	4,855,047
6.75%	10,923,856	15,605,509	4,681,653
6.50%	10,519,269	15,027,527	4,508,258
6.25%	10,114,682	14,449,545	4,334,864
6.50%	**10,519,269**	**15,027,527**	**4,508,258**
6.25%	10,114,682	14,449,545	4,334,864
6.00%	9,710,094	13,871,563	4,161,469
5.75%	9,305,507	13,293,581	3,988,074
5.50%	8,900,920	12,715,600	3,814,680
5.00%	8,091,745	11,559,636	3,467,891

Rate	1-M LIBOR	Spread
7.50%	5.000%	2.50%
7.25%	4.750%	2.50%
7.00%	4.500%	2.50%
6.75%	4.250%	2.50%
6.50%	**4.00%**	**2.50%**
6.25%	3.75%	2.50%
6.00%	3.50%	2.50%
5.75%	3.25%	2.50%
5.50%	3.00%	2.50%
5.00%	2.50%	2.50%

6. CONSTRUCTION

With guidance from Lease Crutcher Lewis (LCL), we have estimated that the total construction cost for the Yale Blocks, including parking, is approximately $173mm. From deconstruction of existing structures to completion of the development should take approximately 14 months of actual construction time

PARKING

Based on conversations with LCL's senior estimator, we estimate that the parking structure can be constructed at a cost of $80 per SF. This price includes excavation, concrete, street work, and a level post-tensioned concrete lid to build our retail above. We can achieve this lower cost due to the fact that there will be reduced excavation costs for the underground parking. Moreover, the large parking floor plate enables heavier, more efficient equipment to excavate quicker than would be possible with two separate garages – one on each block. Additionally, by connecting parking on blocks 10 and 11, we avoid the costly and complex tunneling that would need to occur from one block to the next. Instead, we are able to excavate Harrison Street, which will need to be replaced anyway. The floors of the garage will be constructed with post-tensioned concrete, which will decrease the depth we will need to excavate. The efficiency of our large floor plate will keep the price per space low. And, since Harrison Street will need to be replaced, we will build parking under the street and fill to grade to allow for the green street improvements.

Capital Budget

HARD COSTS	
Land Acquisition	$24,375,000
On-Site Development (Including Demo)	$319,896
Off-Site Development GREEN STREET	$509,060
Apartment hard	$55,071,000
Retail Hard	$17,346,476
Parking Hard	$14,586,780
Historic Rehab	$5,000,000
Hard Cost Contingency 8%	$7,360,340
Development Fee 4% HC	$4,659,525
Total Hard Costs	**$129,228,078**

SOFT COSTS	
Apartment Soft	$4,577,209
Retail Soft	$1,307,774
Parking Soft	$653,887
Architecture and Engineering	$7,775,000
Attorney	$3,000,000
Accountant	$50,000
Market Research	$20,000
Permits/Fees & Planning	$1,500,000
Environmental	$2,500,000
Soils/Appraisal/Market Report	$100,000
Property Tax	$2,000,000
Sales Tax	$7,029,944
Insurance	$100,000
Utilities	$400,000
Marketing	$500,000
General & Administrative	$400,000
Soft Cost Contingency 2%	$439,677
Interest Reserve	$3,800,000
Loan Fees	$3,000,000
TI	$5,412,972
Capitalized Operating Expenses During Sales Period	
Total Soft Costs	**$44,566,463**

Total (Pre-construction Loan) Development Costs	**$173,794,541**

The green street improvements, which include narrowed streets, larger and wider pedestrian areas, and larger planting areas will be constructed along with the parking structure.

We decided to only use half of the north block for underground parking for two reasons. First, we discovered a sewer line running down the alley which would have to be moved to access the eastern half of the block. The extra costs involved with this procedure would not warrant the additional parking. Second, not having parking under our grocery tenant will allow us to build a larger floor to ceiling height for the grocer.

RETAIL

We plan to construct the retail portion of our project with poured-in-place concrete. The walls will be formed concrete construction, with glazed curtain walls. The floor of the retail, which is also the roof of the parking structure, will be post- tensioned concrete. The roof of the retail will also be post- tensioned concrete. Post-tensioned concrete is a cost upgrade from beams and slab, but will benefit our retailers by creating larger open spaces, which they desire. Furthermore, there will be fewer structural columns for the retailers to work around. We are estimating a cost of $141 per square foot for retail, based on conversations with Lease Crutcher Lewis. These costs do not include any interior work. This is a vanilla shell price, with utilities and HVAC stubbed to the units, ready for tenant improvements. Tenant improvement allowances will be negotiated on a tenant-by by-tenant basis. Our weighted average tenant allowance is $33 per square foot.

Retail construction will coincide with the construction of the parking structures. The time frame of this phase of construction will be the same six month period for the parking structure. Since the floor of the retail will be constructed as the roof of the underground parking structures, we can phase the retail as needed for absorption. It will be a matter of constructing the walls and roof, which would be approximately two months for each half block.

The historic Supply Laundry building will undergo renovations as soon as construction on the parking begins, due to the fact that there is no parking below the structure. Since McMenamins is an anchor tenant and has a history of historic renovations we allocated to them an actual cost allowance of up to $5 million for tenant improvements and structural renovations, subject to approvals by Vulcan.

Construction of the free-standing retail building that will be our grocery tenant will be constructed at the same time as the Supply Laundry building. This building also is not dependent on the parking to begin construction, as there is not a parking structure underneath. Constructing our grocery tenant's building early benefits the remainder of our retail tenants.

There are several construction risks inherent in Yale Blocks' parking and retail components:

- *Material and labor shortages and delays*: One way we plan to mitigate cost overruns due to higher costs and extended schedules is to use guaranteed maximum price construction contracts. Currently escalation clauses for these types of projects are between 8-10%. We have added that amount to our budget.

- *Street closure*: Permits from the city of Seattle to close Harrison Street during construction may complicate the process. However, considering that Harrison Street ends two blocks east at the freeway, and currently has primarily local traffic, we do not anticipate this closure as being troublesome.

- *Ground water*: The risk exists that we may need to de-water the site upon excavation, introducing added costs. However, this was not a problem on neighboring projects.

Proforma Fund Flow and Construction Time Line

		Month	-	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Uses																				
Land Acquisition	24,375,000	100%	24,375,000																	
On-Site Development (Including Demo)	319,896			319,896																
Off-Site Development (Street improvements)	509,060	100%			254,530	254,530														
Apartment hard	55,071,000	100%								6,883,875	6,883,875	6,883,875	6,883,875	6,883,875	6,883,875	6,883,875	6,883,875			
Retail Hard	17,346,476	100%					5,782,159	5,782,159	5,782,159											
Parking Hard	14,586,780	100%		4,862,260	4,862,260	4,862,260														
Historic Rehab	5,000,000	100%		833,333	833,333	833,333	833,333	833,333	833,333											
Hard Cost Contingency 8%	7,360,340	100%		525,739	525,739	525,739	525,739	525,739	525,739	525,739	525,739	525,739	525,739	525,739	525,739	525,739	525,739			
Development Fee	4,659,525	55%		931,905					465,953								1,164,881			
Total Hard Costs	**129,228,078**		**24,375,000**	**7,473,133**	**6,475,862**	**6,475,862**	**7,141,231**	**7,141,231**	**7,607,183**	**7,409,614**	**7,409,614**	**7,409,614**	**7,409,614**	**7,409,614**	**7,409,614**	**7,409,614**	**8,574,495**	**-**	**-**	**-**
Apartment Soft	4,577,209	100%								572,151	572,151	572,151	572,151	572,151	572,151	572,151	572,151			
Retail Soft	1,307,774	100%					435,925	435,925	435,925											
Parking Soft	653,887	100%		217,962	217,962	217,962														
Architecture and Engineering	7,775,000	100%		555,357	555,357	555,357	555,357	555,357	555,357	555,357	555,357	555,357	555,357	555,357	555,357	555,357	555,357			
Attorney	3,000,000	100%		990,000	990,000	1,020,000														
Accountant	50,000	100%		50,000																
Market Research	20,000	100%		20,000																
Permits/Fees & Planning	1,500,000	100%		1,500,000																
Environmental	2,500,000	100%		833,333	833,333	833,333														
Soils/Appraisal/Market Report	100,000	100%		100,000																
Property Tax	2,000,000	100%		1,000,000												1,000,000				
Utilities	400,000	100%		28,571	28,571	28,571	28,571	28,571	28,571	28,571	28,571	28,571	28,571	28,571	28,571	28,571	28,571			
Marketing	500,000	100%								31,250	31,250	31,250	31,250	31,250	31,250	31,250	31,250	31,250	31,250	31,250
General & Administrative	400,000	100%		28,571	28,571	28,571	28,571	28,571	28,571	28,571	28,571	28,571	28,571	28,571	28,571	28,571	28,571			
Insurance	100,000	100%	50,000	50,000																
Sales Tax	7,029,944	100%		502,139	502,139	502,139	502,139	502,139	502,139	502,139	502,139	502,139	502,139	502,139	502,139	502,139	502,139			
Tenant Improvements	5,412,972	100%								676,622	676,622	676,622	676,622	676,622	676,622	676,622	676,622			
Soft Cost Contingency 2%	439,677	100%		31,406	31,406	31,406	31,406	31,406	31,406	31,406	31,406	31,406	31,406	31,406	31,406	31,406	31,406			
Interest Reserve	3,800,000	100%			33,186	85,708	138,677	186,679	234,940	285,988	340,813	395,990	451,519	507,404	563,645	620,244	682,621			
Loan Fees	3,000,000	100%	3,000,000																	
Capitalized Operating Expenses During Lease up	-										9,967	19,934	29,901	39,868	49,835	59,803	69,770	79,737	89,704	99,671
Total Soft Costs	**44,566,463**		**3,050,000**	**5,907,340**	**3,220,526**	**3,303,048**	**1,720,646**	**1,768,648**	**1,816,909**	**2,712,055**	**2,776,847**	**2,841,991**	**2,907,488**	**2,973,339**	**3,039,547**	**4,106,114**	**3,178,458**	**110,987**	**120,954**	**130,921**
Total Uses	**173,794,541**	**100%**	**27,425,000**	**13,380,473**	**9,696,388**	**9,778,910**	**8,861,876**	**8,909,878**	**9,424,093**	**10,121,668**	**10,186,461**	**10,251,605**	**10,317,101**	**10,382,953**	**10,449,161**	**11,515,728**	**11,752,953**	**110,987**	**120,954**	**130,921**
Sources																				
Equity	34,678,908	100%	27,425,000	7,253,908																
Debt	138,715,633	99%		6,126,565	9,696,388	9,778,910	8,861,876	8,909,878	9,424,093	10,121,668	10,186,461	10,251,605	10,317,101	10,382,953	10,449,161	11,515,728	11,752,953			
Running Debt Total					15,822,952	25,601,862	34,463,738	43,373,617	52,797,709	62,919,377	73,105,838	83,357,443	93,674,545	104,057,497	114,506,658	126,022,386	137,775,339			
Income											33,224	66,447	99,671	132,895	166,118	199,342	232,566	265,789	299,013	332,237
Units/Mo											23	23	23	23	23	23	23	23	23	23
Total Sources not including sales proceeds			**27,425,000**	**13,380,473**	**9,696,388**	**9,778,910**	**8,861,876**	**8,909,878**	**9,424,093**	**10,121,668**	**10,186,461**	**10,251,605**	**10,317,101**	**10,382,953**	**10,449,161**	**11,515,728**	**11,752,953**	**-**	**-**	**-**
Surplus (Deficit)			**-**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**154,802**	**178,059**	**201,316**

RESIDENTIAL

Using residential modular units that have not been tested on a large scale in the northwest introduces cost estimating challenges. However, our team has followed all the logical steps to arrive at what we believe is an accurate unit cost for modules. In conversations with Bellevue-based Rafn Construction, which worked closely with Unico, Mithun, and HyBrid, they mentioned that the costs are similar to site- built construction. We estimate that our modular residential component can be built for $175 per square foot. This includes the modular units and all site requirements such as walkways, elevators, and common areas. Typical site built apartment construction costs run between $145-$200 per foot depending on design and layout, according to Lease Crutcher Lewis. Because of the economies of scale, time savings, and extensive testing of the prototypes, we believe these estimates are conservative, and that actual construction costs can be reduced as techniques, production and installation at a larger scale are perfected.

The construction time line is one of the most favorable aspects of the modular concept. At the time we begin constructing the parking and retail, we execute the purchase orders with the modular unit manufacturer for the first phase of units. In the six months that we are constructing the parking and the retail, the modular units are being built in the factory.

18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31,250	31,250	31,250	31,250	31,250														
109,638	119,605	129,572	139,539	149,506	159,474	169,441	179,408	189,375	199,342	209,309	219,276	229,243	239,210	249,177	259,144	269,112	279,079	279,945
140,888	**150,855**	**160,822**	**170,789**	**180,756**	**159,474**	**169,441**	**179,408**	**189,375**	**199,342**	**209,309**	**219,276**	**229,243**	**239,210**	**249,177**	**259,144**	**269,112**	**279,079**	**279,945**
140,888	**150,855**	**160,822**	**170,789**	**180,756**	**159,474**	**169,441**	**179,408**	**189,375**	**199,342**	**209,309**	**219,276**	**229,243**	**239,210**	**249,177**	**259,144**	**269,112**	**279,079**	**279,945**
365,460	398,684	431,907	465,131	498,355	531,578	564,802	598,026	631,249	664,473	697,697	730,920	764,144	797,368	830,591	863,815	897,039	930,262	933,151
23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	2
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
224,572	**247,829**	**271,085**	**294,342**	**317,598**	**372,105**	**395,361**	**418,618**	**441,875**	**465,131**	**488,388**	**511,644**	**534,901**	**558,157**	**581,414**	**604,670**	**627,927**	**651,184**	**653,206**

When the site is ready for the modules, they are delivered and set in place using a mobile crane, not a costly tower crane, in a matter of days. The use of a truck mounted crane also benefits phasing of the project. For a comparable, the 102 units of the Moho project in Manchester, UK were placed up 7 stories in 17 days. It will take approximately one month to deliver and set all the modular units and finish each half block phase of the project. The modular units become very scalable depending on market absorption. According to Rafn Construction and Unico, we will be eliminating approximately six to eight months of construction time and six months of carrying costs.

There are several risks inherent in urban residential modular construction:

- *Relatively new concept*: The product is untested in the Northwest, so the manufacturer may have problems delivering the product on time. However, similar projects building hotel units from the Transform factory have not met such problems. Additionally, the environmentally-friendly Seattle mind set is consistent with the benefits of modular units.

- *Lag time causes construction delays*: There may be lag times between the purchase order and manufacture / inspection of the

Bureau of Labor & Industries, the permits can be issued in 6 days versus 150 days in the City of Seattle, according to Unico.

- *Logistics of delivery*: Another risk is the logistics of trucking the units to the site and staging the trucks as the modular units are placed on site. These risks can be mitigated by good project management.

- *Construction defects*: One large risk that many residential developers run into is construction defects construction defects, whether it is cosmetic or health related, which can be mitigated by factory production. Due to the fact that construction takes place in a controlled environment with products that are never exposed to the elements during construction. We are essentially eliminating moisture, and thereby eliminating the largest single owner risk - mold.

7. LEED GOALS

Yale Blocks seeks a LEED Gold certification. Our team worked closely with Brightworks, a LEED consulting firm, to identify opportunities to implement various sustainable strategies. The LEED scorecard can be found in the appendices.

Sustainable Sites: The brownfield, public-transit-oriented development site will contain ample bicycle parking and will establish contracts with low-emitting Zip Cars. Because the project is within a short walking distance to more than 12,000 jobs, a large number of daily commuter trips will be eliminated. Although the residential program is highly dense, courtyards create opportunities to introduce native vegetation throughout the design. Along with these green roofs, the top floor module units will have roofs with a high solar reflectivity index.

Water Efficiency: Through water efficient landscaping and residential units containing low-flow finish plumbing fixtures, the Yale Blocks plan is to reduce its water usage by at least 30%.

Energy and Atmosphere: The Yale Blocks plan seeks to achieve 28% energy savings above ASHRAE standards. It will do this through a number of innovative approaches. First, each residential module is outfitted with a thermally efficient envelope, LED lighting fixtures, and energy efficient air-to-air heat pumps, dramatically decreasing lighting and heating/cooling loads. Operable windows and cross ventilation in every unit and favorable wind orientation will allow for excellent through ventilation, making cooling unnecessary on all but the warmest days. The retail development will take waste heat from various large retailers, such as Trader Joes, and pre-heat a central water tank. This is a proven strategy has used successfully with Whole Foods in Portland, and significantly cuts down on energy costs. The project plans to try to take advantage of the water table by implementing an open loop ground source heat pump strategy for retail. In this scheme, a supply and return well will be drilled in each of the blocks and heat will be exchanged in a heat pump. Each retailer's heating and cooling will be flow metered, so that proper NNN pricing can be established. As windows are the most significant areas of heat gain and loss, all retail and residential windows will be specified as low-E clear Solarban glass in the fiberglass frames used by Unico for its demonstration models.

Materials and Resources: As the majority of the site will be disassembled, with the exception of the historic Supply Laundry building, Yale Blocks is not eligible for building reuse credits. However, through careful waste management it will be able to divert at least 75% of construction waste to material reprocessing plants. Additionally, with the heavy use of high-recycled content steel in this project, the Yale Blocks will use more than 20% recycled construction content. Lastly, one of the major benefits of using modular units is the lack of waste created at the production facility. Since units are created in bulk using computer-operated optimizing saws and other equipment, the assembly plant is able to specify exact dimensions, thus eliminating the excess waste that is created in stick frame building. Moreover, none of the minimal waste is deposited in landfills. Even sawdust is vacuumed and reused.

Indoor Air Quality: HyBrid has designed its modular units with sustainability in mind. Thus, the units are specified with operable windows, low VOC-emitting wall, floor, and counter coverings.

Innovation and Design Process: The Yale Blocks have the opportunity to attain several innovation credits through the large scale re-introduction of high quality urban module units in the United States. Additionally, through green cleaning and off site construction that brings waste to a bare minimum, the Yale Blocks will be a model for low impact high density residential development. Lastly, the lower fossil fuel emissions from our modular construction may qualify us for additional innovation credits. Studies have shown that modular construction cuts gas used by construction workers by up to 70%. This has clear environmental benefits.

Historic Supply Laundry Building: Because McMenamins will be managing its own tenant improvements, we will encourage the company to seek LEED gold as well. Since the Supply Laundry building will be entered on the National Historic Registry, we can negotiate with McMenamins to use a portion of the tax incentives to cover LEED soft costs and additional hard costs.

8. CONCLUSION

Vulcan's triple bottom line philosophy has played a significant role in how we arrived at our development program.

- *Financial Return*: Yale Blocks shows a positive IRR return of 23.01% on Vulcan's equity over the course of 10 years and an ROE of 23.6%. We feel confident of this return based on our estimates and various sensitivity testing scenarios.

- *Community:* We will be supplying a full range of goods, services, and housing previously unavailable in the Cascade neighborhood. We will be creating a multi-block retail and residential heart of a neighborhood, which currently has many defunct uses and deteriorated buildings. We will be adding $1.9 million to the annual property tax base. We will be greening the streets and rooftops with natural vegetation, removing cars from the streets, encouraging transit, car sharing, and extensive walking to work which will eliminate thousands of daily car trips in the neighborhood.

- *Environment*: One of the most effective measures we could take with respect to the environment was increase density. We attempted to maximize residential density within the design constraints, and achieved an impressive 166 unites/acre. In addition to focusing on density, we strove to achieve aggressive LEED targets and employed creative thinking around energy issues. With our tenant mix, many of the Cascade residents will not have to travel to get their basic needs met. Lastly, our use of the modular units is perhaps the most sustainable production building method in use today in terms of waste minimization, high quality construction, healthful dwellings with natural cross ventilation and natural light, and flexibility for future urban development.

Throughout our development process, our team focused on addressing each of the judging criteria:

For all these reasons, we believe that Yale Blocks meets and exceeds Vulcan's requirements and will stand as a testament to smart urban development for decades to come.

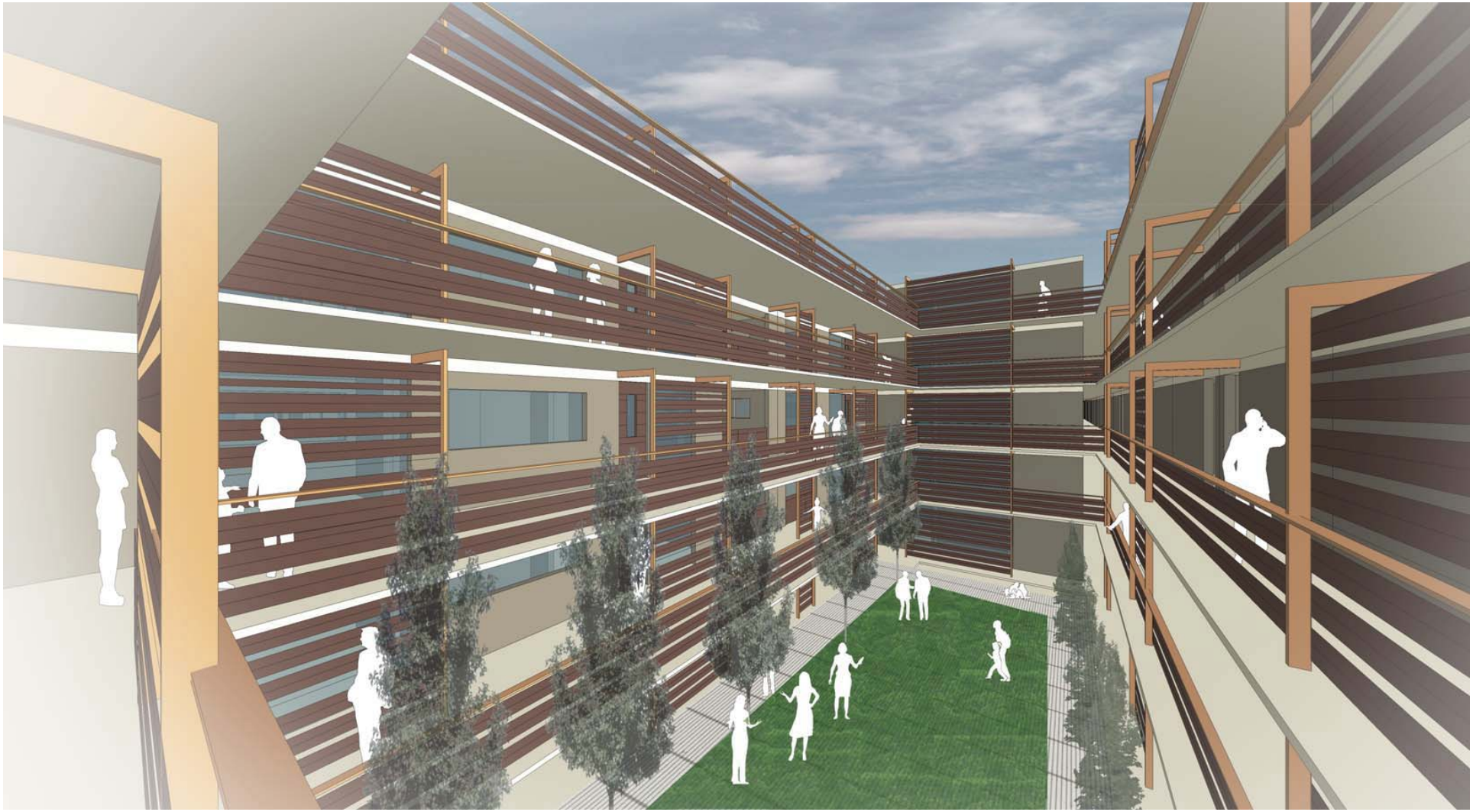
Throughout our development process, our team focused on addressing each of the judging criteria:

- ***Logic***: We began our presentation with a decision tree to map out the key decisions that led us to our development program. We continued by breaking down the components of that decision within the text.

- ***Client Goals and Objectives***: We approached every development program decision with Vulcan's triple bottom line in mind, as described above.

- ***Evaluative Criteria***: Our team was purposefully assembled to represent various areas of expertise needed within the evaluative criteria. Each member played a key role in representing his/her expertise and integrating it with the expertise of others.

- ***Overall Presentation***: We approached the presentation from the point of view of would we want to live in this development. As each member of our team is from South Lake Union's primary demographic – the creative class, this worked well for our team. We also continually backed up any assumptions that we put forth.



Yale Blocks List of Assumptions

Assumption	Source
DESIGN	
Harrison is a green street	RFP
Block 10 & 11, 175,600sf land area	Site Plan
Grade drops 18ft from SE to NW	Point elevations noted on survey
No Transfer of Development Rights for this zoning	SMC 23.49.014
Green Street setbacks apply to Harrison, Pontius Ave, and Yale 1ft back for 2ft up above 25ft max 15ft	SMC 23.48.012
20 foot width on all alleys other than historic properties	Bryce Taylor
Swale on Yale takes 1' width the length of Yale	Bryce Taylor
Split blocks into quads with auto and pedestrian alley	Alley 24
DEVELOPMENT PROGRAM	
Grocer 12,765sf	
Pharmacy 12,000sf	Bartells
Retail total 125,000 sf excluding Laundry and Discovery school	
Supply Laundry Building 30,000sf	RFP
Discovery school 8000sf	RFP
Studio units 289	
Studio plus units 90	
One bedroom units 300	
Two bedrooms 0, Comps offering concessions on two bed units	Market Survey
Parking 732	
Storage units 93	
10 hotels proposed or under construction in CBD area	Market Survey
Low income apartments not viable due to escalating market rents	Brandon Morgan w/Vulcan
Amazon adding 1.6 million sf office space	Business Journal
12,000 employees will support the office space	Business Journal
750,000sf office next block	Blume Yale Campus
MARKET	
Average Studio Rent PSF = $2.35	Market Survey
Average 1x1 Rent PSF = $2.33	Market Survey
Average 2x Rent PSF = $2.16	Market Survey
Highest Rent PSF = $4.71	The Cobb
Lowest Rent PSF = $1.01	Mercer View
WEIGHTED* Market Property Average PSF = 2.19	Market Survey
Surveyed residential properties average Occupancy - 93%	Market Survey
Retail occupancy 97%	CBRE
Retail absorption for Yale blocks estimated 9-12 months	CBRE
Annual absorption 5 year trended = 420 units/yr	REIS
Downtown average vacancy 6.8% for properties build 1999+	REIS
Vulcan retail management by CB Richard Ellis	Brandon Morgan w/Vulcan
Parking management by Standard Parking	Brandon Morgan w/Vulcan
Retail rents for SLU $25-$30/sf	Dan McGinnis CBRE
New discovery lease currently $16/sf	Brandon Morgan w/Vulcan
CONSTRUCTION	
Modular construction eliminates 6-8 months of site construction	Rafn Construction
Sewer line runs down alley on north block	Site plan

Swale on Yale not yet approved by city	Brandon Morgan w/Vulcan
Modular constructions cost similar to site built	Rafn Construction
Environmental remediation $2.5 million	RFP
Seismic upgrades to Supply Laundry Building	RFP
6 days to permit modular units	Unico
30 days to set all modular units per half block phase	Rafn Construction
No costly tower crane needed for construction, build with mobile crane	Bart Ricketts w/LCL Portland
No costly tunneling needed to build shared parking under street	Bart Ricketts w/LCL Portland
Retail cost $187 per foot	Bart Ricketts w/LCL Portland
Residential cost $175 per foot	Bart Ricketts w/LCL Portland
Parking cost $80 per foot	Bart Ricketts w/LCL Portland
Demo costs $3 per foot existing structures	Bart Ricketts w/LCL Portland
Green street cost $509,000	Bart Ricketts w/LCL Portland
ECONOMIC MODEL:	
Hurdle rates 8%ROC, 15-18%IRR on 25% equity	Brandon Morgan w/Vulcan
Return on Costs, 8.04%	PSU
Equity IRR 120 months, 23.01%	PSU
Return on 20% Equity, 70.41% Sale, 8.19% Operations	PSU
Equity contribution, Land value + $7.9mm = 32.3mm or 20%	Vulcan Hurdle Rate
Land value $24,375,000	Night Owl info
Assessed land value of Alley 24 block is 1.056 Million	Wally Harding w/Norris Beggs Simpson
Take out loan 6.375% 10/25	JP Morgan, NBS, StanCorp Mortgage Inv.
Construction financing, Libor+ 250 BP, $4,650,000 int.	King County tax assessor
Sales Tax on construction, $7,029,994	King County tax assessor
TI $33/sf weighted average	Wally Harding & Robert Hicock
Going in Cap 6.00%	Robert Hikock w/Integra Realty Resources
Going out Cap 7.00%	Kory Arnston w/SKB
Developer fee 4% Hard costs	Bart Ricketts w/LCL Portland
Contingency 8% Hard costs 2% Soft Costs	Kim Gooding w/HSC Real Estate
Management of Apartment Component 2.5-3%	King County tax assessor
Property tax rate $9.26 per $1000 value	
Loan to Value 60%	
Loan to Cost 80%	
Operating Expense Ratio 28.5%	Kim Gooding w/HSC Real Estate
Average debt service rate 1.25	
HISTORICAL ISSUES	
Exterior walls of laundry must stay along with existing openings	RFP
$5 million seismic upgrades included in retail construction cost	RFP
No new penetrations in exterior without historical approval	RFP/ Brandon w/Vulcan
Apply for National Historic Registration to gain historical tax credits	
PARKING	
Unassigned parking creates shared parking pool	ULI Shared parking survey
Underground parking to maximize density	ULI Shared parking survey
REI Parking Rates $2 for 1-3hrs, $5 for 3-5hrs, $12 for 5hrs+	REI
Pemco parking stalls 248 garage, 43 surface for	Pemco
Residential parking ratio .7 stalls per unit	
Retail parking 3 stalls per 1000sf	
221 less stalls needed by sharing parking	
315 sf per parking stall	

Cash Flow Analysis

		0	1	2	3	4	5	6	7	8	9	10
Land Acquisition & Additional Equity		(24,375,000)	(10,303,908)									
Apartment Unit Mix												
0X1				4,135,590	4,218,302	4,302,668	4,388,721	4,476,496	4,566,026	4,657,346	4,750,493	4,845,503
0X1 +				1,559,250	1,590,435	1,622,244	1,654,689	1,687,782	1,721,538	1,755,969	1,791,088	1,826,910
1x1				6,075,000	6,196,500	6,320,430	6,446,839	6,575,775	6,707,291	6,841,437	6,978,265	7,117,831
Total Potential Gross Income		**(24,375,000)**	**(10,303,908)**	**11,769,840**	**12,005,237**	**12,245,342**	**12,490,248**	**12,740,053**	**12,994,854**	**13,254,751**	**13,519,847**	**13,790,243**
Tenant												
Grocery Anchor				357,420	364,568	371,860	379,297	386,883	394,621	402,513	410,563	418,774
Pharmacy				384,000	391,680	399,514	407,504	415,654	423,967	432,446	441,095	449,917
Discovery Center				128,000	130,560	133,171	135,835	138,551	141,322	144,149	147,032	149,972
Laundry				1,058,580	1,079,752	1,101,347	1,123,374	1,145,841	1,168,758	1,192,133	1,215,976	1,240,295
All other retail				3,345,825	3,412,742	3,480,996	3,550,616	3,621,629	3,694,061	3,767,942	3,843,301	3,920,167
Total Potential Gross Income		**$0**	**$0**	**5,273,825**	**5,379,302**	**5,486,888**	**5,596,625**	**5,708,558**	**5,822,729**	**5,939,184**	**6,057,967**	**6,179,127**
Other Income												
Retail CAM Reimbursements				981,876	1,011,332	1,041,672	1,072,922	1,105,110	1,138,263	1,172,411	1,207,584	1,243,811
Pet Fees												
Late Fees and Other Income												
Rent Forfeits												
Storage				55,800	56,916	58,054	59,215	60,400	61,608	62,840	64,097	65,379
Utility Reimbursements				407,400	419,622	432,211	445,177	458,532	472,288	486,457	501,051	516,082
Monthly Parking				712,950	734,339	756,369	779,060	802,432	826,504	851,300	876,839	903,144
Hourly Parking				554,472	565,561	576,873	588,410	600,178	612,182	624,426	636,914	649,652
Total		**$0**	**$0**	**2,712,498**	**2,787,770**	**2,865,179**	**2,944,785**	**3,026,652**	**3,110,846**	**3,197,433**	**3,286,484**	**3,378,068**
Less: Vacancy & Credit Loss	Retail		10%	(312,785)	(639,063)	(652,856)	(666,955)	(681,367)	(696,099)	(711,159)	(726,555)	(742,294)
Less: Vacancy & Credit Loss	Apartment		5%	(608,862)	(621,243)	(633,878)	(646,771)	(659,929)	(673,357)	(687,060)	(701,045)	(715,316)
Less: Vacancy & Credit Loss	Parking		5%	(63,371)	(28,278)	(28,844)	(29,421)	(30,009)	(30,609)	(31,221)	(31,846)	(32,483)
Total				**(985,018)**	**(1,288,584)**	**(1,315,577)**	**(1,343,147)**	**(1,371,305)**	**(1,400,065)**	**(1,429,441)**	**(1,459,446)**	**(1,490,093)**
Effective Gross Income - Apartment				11,568,378	11,803,616	12,043,675	12,288,654	12,538,656	12,793,786	13,054,148	13,319,852	13,591,009
Effective Gross Income - Retail				5,942,916	5,751,570	5,875,704	6,002,593	6,132,301	6,264,893	6,400,435	6,538,996	6,680,644
Effective Gross Income - Parking				1,204,051	1,271,622	1,304,398	1,338,049	1,372,601	1,408,077	1,444,504	1,481,907	1,520,313
Effective Gross Income		**($24,375,000)**	**($10,303,908)**	**18,715,345**	**18,826,808**	**19,223,776**	**19,629,296**	**20,043,558**	**20,466,756**	**20,899,087**	**21,340,755**	**21,791,967**
Annual Operating Expense												
Less: Operating Expenses												
Real Estate Taxes				813,692	838,103	863,246	889,144	915,818	943,293	971,591	1,000,739	1,030,761
Insurance				464,967	478,916	493,284	508,082	523,325	539,024	555,195	571,851	589,006
Utilities				464,967	478,916	493,284	508,082	523,325	539,024	555,195	571,851	589,006
Advertising & Marketing				232,484	239,458	246,642	254,041	261,662	269,512	277,598	285,925	294,503
Management Fee				348,725	359,187	369,963	381,062	392,493	404,268	416,396	428,888	441,755
Repairs & Maintenance				464,967	478,916	493,284	508,082	523,325	539,024	555,195	571,851	589,006
Administration				348,725	359,187	369,963	381,062	392,493	404,268	416,396	428,888	441,755
Replacement Reserve				348,725	359,187	369,963	381,062	392,493	404,268	416,396	428,888	441,755
Total Apartment Expense				3,487,253	3,591,871	3,699,627	3,810,616	3,924,934	4,042,682	4,163,963	4,288,882	4,417,548
Retail CAM Expenses				981,876	1,011,332	1,041,672	1,072,922	1,105,110	1,138,263	1,172,411	1,207,584	1,243,811
Management Fee				214,409	220,841	227,467	234,291	241,319	248,559	256,016	263,696	271,607
Parking Maintenance				97,245	100,163	103,167	106,262	109,450	112,734	116,116	119,599	123,187
Capital Reserves				40,912	42,139	43,403	44,705	46,046	47,428	48,850	50,316	51,825
Totals Retail & Parking				1,334,442	1,374,475	1,415,709	1,458,180	1,501,926	1,546,984	1,593,393	1,641,195	1,690,431
Total Expenses				**4,821,695**	**4,966,346**	**5,115,336**	**5,268,796**	**5,426,860**	**5,589,666**	**5,757,356**	**5,930,077**	**6,107,979**
Net Operating Income - Apartment				8,081,125	8,211,745	8,344,047	8,478,038	8,613,722	8,751,103	8,890,185	9,030,970	9,173,461
Net Operating Income - Retail & Parking				5,812,525	5,648,717	5,764,392	5,882,462	6,002,976	6,125,987	6,251,546	6,379,708	6,510,527
Terminal Value												224,056,965
Net Operating Income		**($24,375,000)**	**($10,303,908)**	**13,893,650**	**13,860,462**	**14,108,440**	**14,360,500**	**14,616,698**	**14,877,090**	**15,141,731**	**15,410,678**	**239,740,952**
Debt Service				11,109,745	11,109,745	11,109,745	11,109,745	11,109,745	11,109,745	11,109,745	11,109,745	52,277,693
Cash Flow After Debt Service		**($24,375,000)**	**($10,303,908)**	**2,783,905**	**2,750,718**	**2,998,695**	**3,250,755**	**3,506,953**	**3,767,345**	**4,031,986**	**4,300,933**	**187,463,259**
Debt Service Ratio				1.25	1.25	1.27	1.29	1.32	1.34	1.36	1.39	

Cap Rate on Terminal Year NOI 7%

Inflation	
Income	1.02
Expenses	1.03

IRR	23.01%

LEED
LEADERSHIP IN ENERGY & ENVIRONMENTAL DESIGN

The Yale Blocks Development - Vulcan Real Estate

LEED-NC Version 2.2 Registered Project Checklist

Yes ? No Certified 26 to 32 points Silver 33 to 38 points Gold 39 to 51 points Platinum 52 or more points

Yes	?	No	
45	7	8	**Total Project Score**

Y	?	N			
7	7		**Sustainable Sites**		14 Points
Y			Prereq 1	**Erosion & Sedimentation Control**	Required
1			Credit 1	**Site Selection**	1
1			Credit 2	**Development Density**	1
1			Credit 3	**Brownfield Redevelopment**	1
1			Credit 4.1	**Alternative Transportation**, Public Transportation Access	1
	1		Credit 4.2	**Alternative Transportation**, Bicycle Storage & Changing Rooms	1
	1		Credit 4.3	**Alternative Transportation**, Alternative Fuel Vehicles	1
	1		Credit 4.4	**Alternative Transportation**, Parking Capacity and Carpooling	1
	1		Credit 5.1	**Reduced Site Disturbance**, Protect or Restore Open Space	1
	1		Credit 5.2	**Reduced Site Disturbance**, Development Footprint	1
	1		Credit 6.1	**Stormwater Management**, Rate and Quantity	1
	1		Credit 6.2	**Stormwater Management**, Treatment	1
1			Credit 7.1	**Landscape & Exterior Design to Reduce Heat Islands**, Non-Roof	1
1			Credit 7.2	**Landscape & Exterior Design to Reduce Heat Islands**, Roof	1
1			Credit 8	**Light Pollution Reduction**	1

Y	?	N			
3		2	**Water Efficiency**		5 Points
1			Credit 1.1	**Water Efficient Landscaping**, Reduce by 50%	1
		1	Credit 1.2	**Water Efficient Landscaping**, No Potable Use or No Irrigation	1
		1	Credit 2	**Innovative Wastewater Technologies**	1
1			Credit 3.1	**Water Use Reduction**, 20% Reduction	1
1			Credit 3.2	**Water Use Reduction**, 30% Reduction	1

Y	?	N			
8			**Energy & Atmosphere**		17 Points
Y			Prereq 1	**Fundamental Building Systems Commissioning**	Required
Y			Prereq 2	**Minimum Energy Performance**	Required
Y			Prereq 3	**CFC Reduction in HVAC&R Equipment**	Required
4			Credit 1	**Optimize Energy Performance**	1 to 10
	1		Credit 2.1	**Renewable Energy**, 5%	1
	1		Credit 2.2	**Renewable Energy**, 10%	1
	1		Credit 2.3	**Renewable Energy**, 20%	1
1			Credit 3	**Additional Commissioning**	1
1			Credit 4	**Ozone Depletion**	1
1			Credit 5	**Measurement & Verification**	1
1			Credit 6	**Green Power**	1

Y	?	N			
8		5	**Materials & Resources**		13 Points
Y			Prereq 1	**Storage & Collection of Recyclables**	Required
		1	Credit 1.1	**Building Reuse**, Maintain 75% of Existing Shell	1
		1	Credit 1.2	**Building Reuse**, Maintain 100% of Shell	1
		1	Credit 1.3	**Building Reuse**, Maintain 100% Shell & 50% Non-Shell	1
1			Credit 2.1	**Construction Waste Management**, Divert 50%	1
1			Credit 2.2	**Construction Waste Management**, Divert 75%	1
		1	Credit 3.1	**Resource Reuse**, Specify 5%	1
		1	Credit 3.2	**Resource Reuse**, Specify 10%	1
1			Credit 4.1	**Recycled Content**, Specify 5% (post-consumer + ½ post-industrial)	1
1			Credit 4.2	**Recycled Content**, Specify 10% (post-consumer + ½ post-industrial)	1
1			Credit 5.1	**Local/Regional Materials**, 20% Manufactured Locally	1
1			Credit 5.2	**Local/Regional Materials**, of 20% Above, 50% Harvested Locally	1
1			Credit 6	**Rapidly Renewable Materials**	1
1			Credit 7	**Certified Wood**	1

Y	?	N			
11		1	**Indoor Environmental Quality**		15 Points
Y			Prereq 1	**Minimum IAQ Performance**	Required
Y			Prereq 2	**Environmental Tobacco Smoke** (ETS) **Control**	Required
		1	Credit 1	**Carbon Dioxide** (CO_2) **Monitoring**	1
1			Credit 2	**Ventilation Effectiveness**	1
1			Credit 3.1	**Construction IAQ Management Plan**, During Construction	1
1			Credit 3.2	**Construction IAQ Management Plan**, Before Occupancy	1
1			Credit 4.1	**Low-Emitting Materials**, Adhesives & Sealants	1
1			Credit 4.2	**Low-Emitting Materials**, Paints	1
1			Credit 4.4	**Low-Emitting Materials**, Composite Wood & Agrifiber	1
1			Credit 5	**Indoor Chemical & Pollutant Source Control**	1
	1		Credit 6.1	**Controllability of Systems**, Perimeter	1
	1		Credit 6.2	**Controllability of Systems**, Non-Perimeter	1
1			Credit 7.1	**Thermal Comfort**, Comply with ASHRAE 55-1992	1
1			Credit 7.2	**Thermal Comfort**, Permanent Monitoring System	1
1			Credit 8.1	**Daylight & Views**, Daylight 75% of Spaces	1
1			Credit 8.2	**Daylight & Views**, Views for 90% of Spaces	1

Y	?	N			
8			**Innovation & Design Process**		5 Points
1			Credit 1.1	**Innovation in Design**: Provide Specific Title	1
1			Credit 1.2	**Innovation in Design**: Provide Specific Title	1
1			Credit 1.3	**Innovation in Design**: Provide Specific Title	2
1			Credit 1.4	**Innovation in Design**: Provide Specific Title	4
1			Credit 2	**LEED™ Accredited Professional**	1

Courtney Koehler

To: Courtney Koehler

Subject: FW: NAIOP competition

From: "Brandon Morgan" <BrandonMo@vulcan.com>

Date: January 24, 2008 8:57:18 AM PST
To: <pmon1531@aol.com>
Subject: RE: NAIOP competition

I'd say we are no different than "the market" on our typical deals: about 8% return on cost, 15%-18% IRR on 25% equity in the deal.

In terms of any tax abatements or special City financing - no, we don't have any special financing available. There is an abatement at developers' disposal in SLU, along with many other urban center neighborhoods in the City - the Multifamily Tax Exemption program. Washington set the parameters up at the state level, and the cities get to choose where and if to apply it. We can agree to set aside a certain percentage of our apartment units for people making no more than a certain amount of median household income for a period of 10 years. In exchange, we get property tax waived on the residential improvements (but not the land or any commercial improvements) for 10 years. There are three versions of set aside: 20% at 60% of median household income, 25% at 65%, or 30% at 70%. Alley24's apartments are participating in the 20% at 60% version of the program. With the run-up in the apartment market however, starting on one now probably won't pencil out very well as an incentive, since the "opportunity cost" of missing out on 8%-12% rent increases is more than the net benefit. See details on the program at http://www.seattle.gov/housing/incentives/SeattleHomesWithinReach.htm

We're just working on the site, so the City hasn't really seen any of our development plans or have detailed knowledge of the site, with the exception of a few folks at Seattle Public Utilities who came to us for a location to plan the swale for treatment of Capitol Hill's runoff.

The Portland State Development Team would like to thank the following individuals who generously shared their time and insights:

Andy Frichtl	*Interface Engineering*
Andy Friedman	*John L. Scott Real Estate*
Ann Schuessler	*Rafn Project Manager*
Bart Ricketts	*Lease Crutcher Lewis*
Bob Burns	*Specht Development*
Brandon Morgan	*Vulcan Real Estate*
Brian Nelson	*Ankrom Moisan Architects*
Bryce Taylor	*Lease Crutcher Lewis*
Carla Morin	*HSC Real Estate: Alley 24 Resident Manager*
Chris Wotclk	*Recreational Equipment Incorporated*
Christine Douglas	*Pro Sports Club*
Dan McGinnis	*CB Richard Ellis*
Dana Krawczuk	*Ball Janik LLP*
Eric Baxter	*Brightworks*
Ira Rodriguez	*Autodesk*
Jeff Brooks	*GVA Kidder Matthews*
Joel Egan	*HyBrid Seattle*
Kali Rembold Bader	*Rembold Companies*
Kasia Rizzo	*JP Morgan Chase*
Kim Gooding	*HSC Real Estate*
Kory Arntson	*Scanlon Kemper Bard Companies*
Lyle Bicknell	*City of Seattle Senior Urban Planner*
Mike McMenamin	*McMenamins*
Myla Becker	*Cascade People's Center*
Nick Demas	*Cascade People's Center*
Robert Hickok	*Integra Realty Resources*
Shannon McMenamin	*McMenamins*
Terry Metz	*Loan Officer for McMenamins*
Wally Harding	*Norris Beggs & Simpson*

Brad Smith
(student)

Brad is a self-employed builder, developer, and property manager with twelve years of professional experience. Having worked closely with his father, also a homebuilder, his whole life, Brad looks forward to passing his accumulated business acumen down to his own children. Brad's long term vision is to create a strong real estate asset base for his family. Brad holds a BS in Housing Studies from Oregon State University, and is currently a student in PSU's Real Estate Development Program. He is also a Certified Master Builder in Oregon State.

Courtney Koehler
(student)

Courtney is a Commercial Mortgage Loan Analyst for StanCorp Mortgage Investors. Prior to her work at SMI, Courtney worked as an Acquisitions Underwriter for PNC MultiFamily Capital, where she underwrote and closed complex low income and historic tax credit syndications. Prior to PNC MFC, she worked for the H. Naito Corporation handling financial underwriting, and asset acquisition analysis. As part of her work with H. Naito, Courtney designed and managed a 9,000 SF bar as a tenant for the company. She looks forward to someday designing and building a fully sustainable planned development. Courtney holds a BS in Business Administration with a concentration in Finance with a minor in Macro Economics from Oregon State University, and is currently a student in PSU's Real Estate

Kerry Hughes
(student)

Kerry works in property management with HSC Real Estate, Inc.. He has experience managing multifamily real estate asset classes including suburban garden style and downtown high rise apartments. Building on his growing real estate experiences, Kerry aspires to one day develop high density mixed use urban developments that exemplify visionary concepts and cutting edge technologies. Kerry, a licensed pilot, enjoys exploring the skies in his free time. Kerry received a BA in Political Science and minor in Economics from The University of North Dakota, and is currently a student in PSU's Real Estate Development Program.

William Macht
(Team Liaiosn)

William Macht brings over 27 years of teaching experience to Portland State University as an Adjunct Professor in the school of Urban Studies & Planning. He is currently President of Macht & Company, a development, managment, consulting and investing firm. In these positions, as in much of his prior development experience, he concentrates on the types of mixed-use, public-private partnerships and retail marketplaces pioneered by the Rouse Company, which he served as a Development Director.

Matt Stein
(student)

Matt is Operations Director and Construction Coordinator at Green Gables Design & Restoration. Prior to Green Gables, Matt worked as a business consultant and investment banker for Arthur Andersen and Prudential Securities respectively. In 2004, Matt moved to Portland from Boston to pursue his passion, green building. While swinging a hammer with a framing crew and attending every green building conference he could find, Matt learned the business from the ground up. His long term vision is to promote green building practices through various business ventures. Matt holds a BS in Civil Engineering from Stanford University and is a LEED Accredited Professional. Matt is currently a student in PSU's Real Estate Development Program.

Pat Monaghan
(student)

Pat is a mortgage broker for American Pacific Mortgage Corp., where he handles residential mortgages and construction loans. Pat has his eye on some day working for himself as a developer participating in infill urban and small town main street development. Pat holds a BS in Business Administration from University of Oregon, and is currently a student in PSU's Real Estate Development Program.

Staci Beck
(student)

Staci is part of the design / technical staff at TVA Architects. She has experience working with government, institutional, and private sector project types. Staci's long term goal is to become an urban developer and has a strong interest to pursue in-fill commerical projects. Staci earned a Bachelors of Architecture from Cornell University, and is currently a student in PSU's Real Estate Development Program.